

ILLINOIS AND INDIANA  
MEDICAL AND SURGICAL JOURNAL.

Vol. I. NEW SERIES.—AUGUST, 1846. No. 3.

PART I.—ORIGINAL COMMUNICATIONS.

ARTICLE I.

*Sulphate of Quinia in the Congestive Modifications of Scarlet Fever and Measles.* By DANIEL STAHL, M. D., of Quincy, Illinois.

It has long been questioned, whether medicine, in the true sense of the word, is a *Science* or not, and however many there may be, that claim for it a place in the circle of Sciences, it is to my mind doubtful whether it deserves it. As long as we have not incontrovertible data to go upon; as long as we cannot with mathematical certainty explain the phenomena of life; as long, I say, as we do not proceed from *positive principles*, so long can it not claim a place in the company of Sciences. It is, at least, entitled to the appellation of an *Experimental Science*. It draws from experience, and refers scattered facts and phenomena, to general laws. But as long as it has to deduce, or discover these hidden laws from appreciable phenomena, so long is it encumbered with hypotheses, which we all know are very unsafe until the mass of phenomena, satisfactorily explained thereby, become so numerous that the explanation has ceased to be an hypothesis. While, however, we thus support one hypothesis after another, and while by the multiplicity of observations and experiments, we discover, that that, which was but yesterday an hypothesis, to be to-day considered a law of nature, we at the same time discover new laws, and throw new light upon a department of nature the most hidden in its operations, and the most bene-

ficial in its practical applications. Whoever, therefore, multiplies the mass of isolated facts, whoever communicates his experience and observations, especially if new, contributes to the improvement of medicine and becomes a benefactor to his race. Every Physician of many years practice will admit, that the character of diseases changes, that remedies which he in former years administered with success, are now either inert or injurious, and that therefore, he has to look about for a new remedy, or apply an old remedy in a new disease. If he has the good fortune to hit upon a remedy, which answers the purpose, he ought to let it be known, in order to afford those who have the talents, and opportunities, means to answer the whys and wherefores. The same is applicable to discoveries of new remedies. These remarks may probably subject me to the reproach, that I put our profession too low in respect to its claims as a science; be it so: I will not defend myself, but only ask those who thus reproach me; "Can you in every case, when you administer a dose of calomel, say, what are the pathological changes you wish to remove, and what is, in this case, the *modus operandi* of the calomel? Do you never administer calomel or any other remedy for no other reason, but because it had a salutary effect in a similar case? And do you not call this, in your inmost thoughts empiricism?"

In medicine we want no idle words, nor talk for talking's sake; we want facts, true observations, and laws and principles deduced from them. The Homœopathist will prove by the handsomest sophistry in the world, that a grain of *Balladonna* diluted and shaken 20 times up and down, is enough to destroy a whole community, yet we all know that experience proves the contrary. Dr. Franklin, in an answer to the enquiry of a wag, laid down a principle, that we as medical men ought to pursue. A wag, in Paris I think, asked him the reason why a piece of solid iron, made in the shape of a fish, would swim in water; the sagacious Doctor answered him, "Let me see a solid piece of iron thus shaped, swim, and afterwards I will endeavor to find an explanation." Let therefore every new fact, every new observation be recorded and give thereby those who have the talents, materials for a systematic arrangement.

These preliminary remarks I have intended not only as an

apology for troubling my readers with the account of the effects of so well known a medicinal agent as Quinine, but also as an argument to the members of our profession to prove, that we, as private practitioners, can benefit mankind as much, if not more, by communicating isolated facts, as by searching constantly for theories and hypotheses.

*Sulphate of Quinia* has been looked upon as a tonic, and until within a very recent date, no practitioner would venture to administer it in any case during febrile excitement, or when sordes in the primæ viæ were suspected to be present, except in cases of great emergency. But these few cases of emergency, in which it has been given successfully, teach a lesson that should not be lost sight of. They have shown us, that Quinine is not a mere tonic, in the common acceptation of the term, that it does not excite the vascular system, but that it is a *nervine* in the strictest sense of the word, that it merely gives tone and energy to the nerves if prostrated, and that it thereby assuages the undue excitement, consequent, not upon an hyperdynamic, but more upon an adynamic condition of the system, and consisting of, an effort of the weakened powers, to regulate the vital functions, which for this purpose require more energy of the nerves, than they in such cases possess. Such a condition it is, which I consider, constitutes what we improperly call a *Congestive State* or *Congestive Fever*; and such is the condition, with which the practitioner in this country has often to battle, in autumnal bilious fever, pneumonia notha, (vulgarly called winter fever,) scarlet fever, and measles. Formerly, physicians were led astray in the treatment of congestive fever, and judging from the term "congestion," mistook the pathology of this modification of diseases, particularly of bilious fever, and in accordance with the advice of Armstrong, bled profusely, and frequently, no doubt, bled their patients to death. Happily has the introduction of inductive reasoning into our practice convinced us of the error of our predecessors, in this respect; we have found that depletion cannot remove this condition which is called congestion, but that a remedy which has been designated as a tonic (I mean the Quinine,) not only effects this, but also, and at the same time, instead of accelerating, diminishes the frequency of the pulse.

I never have seen many cases of the congestive modification

of *Scarlet fever*, such as are described in books, particularly such as Eberle describes; but in the epidemic which prevailed here last fall and last winter, I had occasion to see many cases attended with "oppression, deep seated pain and a sense of weight in the head, fullness and great muscular prostration," with "quick, short respiration." In these cases the pulse was not "slow, irregular and weak," but quick, soft and regular. In such cases I gave the Quinine in large and often repeated doses, with the happiest effects. If the skin was pale or livid, I gave the Quinine with capsicum; but as the most of these cases in our last epidemic exhibited only oppression, prostration, quick pulse, and red and warm skin, I gave the quinine alone.

I have obtained the most remarkable and prompt effect from Quinine, in the *congestive modification of measles*, the most prominent features of which are *unusually quick, short and anxious respiration*, and *quick pulse*. I will relate the history of three cases of this kind, which I have attended, and as I do it principally from memory, I hope for the reader's indulgence for the imperfections of the pictures I shall present.

CASE I. Mary Carter, aged 12, a healthy girl of rather a nervous temperament, was taken on the 10th of March, 1846, with the initiatory symptoms of measles, such as coryza, inflamed conjunctiva, cough, &c., for which I ordered my usual prescription in such cases, an emetic of Ipecacuanha. The next day the measles made their appearance in the usual way, and with the usual symptoms. In the night, from the 13th to the 14th, the parents discovered that she *drank* more than common, and had great difficulty of breathing. In the morning of March 14th, I was called, and found her, as far as I can recollect, with the following symptoms: measles over the whole body, red eyes, *respiration very quick, short and laborious*, so that she had to be propped in bed, and complained constantly of want of air; the chest was heaving, the nostrils dilated, and the *alæ nasi* playing, and the whole appearance presented the picture of a dreadful struggle with death. Patient withal was perfectly conscious of this, and spoke, with great difficulty, of the imminent danger in which she was placed. Much thirst; *pulse 140 in a minute*, regular, soft, but not very weak, nor small; constipation; skin warm. There was great oppression in the scrobiculus cordis, so that deep inspiration was impossible.



I prescribed a large dose of calomel and gr. ii of quinine, with  $\frac{1}{2}$  gr. of opium every  $\frac{3}{4}$  to  $1\frac{1}{2}$  hours. With every dose of these powders, the breathing improved and pulse became slower.

*March 15th.* Bowels moved by means of injectives. Breathing easier, and pulse 120 in a minute; can lay lower with her head. Continued with the above powders every  $1\frac{1}{2}$  hour, and, as she became better, every 2 hours.

*March 16th.* Drinks less, slept some, pulse slower. Continued the powders every 2 to 3 hours. Under this treatment in conjunction with the prescription of some adjuvants, such as mustard draughts, blisters to the chest, warm applications and cathartics, my patient entirely recovered.

*CASE II. March 3d.* Fred. Beck, aged 4, a strong, healthy, German boy, who had never been seriously ill, except an attack of scarlet fever, was taken in the usual way with the measles, which in the usual time made their appearance on the skin, and extended from the face downwards, over the whole body. In the night, from the 2d to the 3d of March, his parents discovered some difficulty of breathing. In the morning I was called and found that the eruption maintained the usual (normal) color, *but the breathing was so short and quick, and withal so laborious*, that it alarmed me. All the muscles contributing to the act of respiration were in full play, and the lower jaw was at each inspiration, drawn down. The pulse was rather soft, small, and so quick that I could hardly count it. I gave him immediately *quinine in grain doses* every hour, and in 24 hours from the time I was first called, I considered him out of danger.

*CASE III. March 31st.* T. Blanke, 7 years of age, who has always enjoyed excellent health, of a stout, robust frame, was taken in the usual way with the measles, which in due course of time made their appearance. On the 31st of March I was called; I found his skin very hot, exanthema partly disappeared, severe hard cough, *breathing short, quick and laborious, pulse very quick and full*, but not hard, thirst excessive, constipation. Under any other circumstances, and had I not seen the above two cases, I should have depleted this boy, but fearing venesection, I ordered a cathartic, and a solution of tart. antim. in nauseating doses. The next day the fever had diminished, but the pulse was, if anything, quicker than

before, the breathing worse, and the cough not much better. I now commenced the use of quinine, by which he improved so much that after he had taken it about 20 hours, I gave him some of Coxe's Hive Syrup, and soon dismissed him cured.

## ARTICLE II.

*The remote and proximate cause of Bilious Fevers of the South and West, considered in the light of Liebig's Theory of Animal Heat.* By SAMUEL G. ARMOR, M. D., of Rockford, Ill.

The science of Medicine should be strictly eclectic. Its object should be to glean well established facts from every department of Nature. It should be the great aim of the intelligent physician, therefore, to divest the sciences of their isolated character. By studying them in this manner, we lose their real end and object, and are apt to forget the great truth of the unity of all science. If the question were propounded as to the true object of science, the answer would be very indefinite, and, doubtless, by no means uniform or consistent; each would assign the special end of the one he cultivates, without making a single deduction from the progress of his speciality, to that of other specialities. Having studied the elements of the sciences in themselves, we should study them in their relations, and this must end in establishing the most intimate ties between the most distant sections of the vast net work of the sciences.

The science of Medicine, practically considered, is perhaps more directly and largely indebted to modern improvements in Chemical science, than all others combined. Chemical researches into the composition of the fluids and solids of the animal body, and comparative examinations of them under the differences of age, sex, climate, mode of life, and the various modifications of disease, have thrown great light both on the healthy and disordered actions of our frame; and by discovering what particular ingredients existed in undue proportion, they have also suggested the means of relief to be often the internal administration of suitable chemical remedies. The views, for instance, respecting the nature and treatment of calculus diseases, are truly chemical; and for the theory of diabetes we are also indebted to Chemistry. In the de-

partment of Toxicology we are also largely indebted to the progress of this science. The specification and therapeutical application of remedies, the knowledge of the action of the different kinds of poisons, and of their antidotes, are learned from chemical research and experiments. The object of this paper is to present some thoughts founded on the acknowledged principles of Chemical science, in relation to the operation of that intangible, undefined and undefinable something, called "Miasma," together with the rationale of the therapeutic action of Quinine as its antidote. The suggestions I have to make are founded principally on the research and observation of that distinguished and able chemist, Prof. Liebig, and so far as relates to his theory of Animal Heat, I claim no originality. His elaborate and ingenious argument on this long mooted question may be briefly summed up in this proposition: "The combination of a combustible substance with oxygen is, under all circumstances, the only source of animal heat, and the combination of oxygen with carbon is always accompanied by the disengagement of heat." This being assented to, it follows that the amount of oxygen consumed bears a relation, from necessity, to the amount of heat liberated, and this depends upon the temperature of the surrounding medium. Nature requires that the quantity of inspired oxygen shall increase or diminish in proportion to the temperature of the external air. The capability of this physiological adaption to all climates, appears to be peculiar to Man, and it is a wise provision of nature, that he has been endowed with this power. It enables him to pass into all the climates of the earth; to reside beneath the pole or the equator; to live under a burning sky or on an ice-bound soil; and to inhabit regions where the most hardy animals can scarcely exist. But this change of climate and season are necessarily connected with corresponding changes in the action of vital force, and this depends upon the laws which govern the production of animal heat. The blood of the inhabitants north of the Arctic Circle has a temperature as high as the inhabitants of the Torid Zone; in the one case the temperature is nearly equal to that of the blood, in the other from  $75^{\circ}$  to  $90^{\circ}$  lower. The loss of heat from external temperature, in the one case, must be supplied by an increased quantity of inspired oxygen, and this increased proportion of oxygen, found in a dense and cold atmosphere,

must have a combustible substance with which to unite. It follows, then, that the quantity of oxygen must be increased in the same ratio with combustible matters. The appetites, practices, and customs of tribes and nations of different climates, throw much light upon this subject. If we should take exercise in a cold atmosphere in winter, or go naked like savages, we would require food containing carbon and hydrogen in the same increased ratio, and could eat with impunity, (as is the case with northern tribes,) large quantities of flesh, tallow, oil, &c. But let us take another and a physiological view of this question. An Englishman accustomed to good dinners goes South—finds his appetite fails him—uses stimulating condiments to excite it. But the temperature of the atmosphere does not require the consumption of a large quantity of oxygen, and nature, true to her established laws, has not furnished a large amount. The result is, that a large portion of the carbon thus introduced into the system, is unconsumed. Hence the pathological effects. Compounds, rich in carbon, appear in the urine, which, in consequence, acquires a brown color. It is also detected in the peculiar odor of the perspiration, which, says Prof. Liebig, contains much carbon. The dark and tawny color of the skin is also referable to the operation of this law of Animal Chemistry. Have we not, then, many facts drawn from the laws of Chemical relation which throw much light on diseased action? And how beautifully those laws harmonize with the general economy of Nature? If the same quantity of oxygen was consumed in the warm summer months, when the surrounding medium did not rapidly liberate the heat thus generated, the result would be excessive febrile excitement, and the destruction of our organism by the action of oxygen. The practical inference from this is, that in warm seasons of the year, or in a southern climate, we should use sparingly of carbonized articles of diet. To use large quantities of flesh, oil, and fatty substances, when the surrounding medium does not require the production of so much animal heat, and when in fact, nature has not provided, in the same proportion, a counteracting or consuming agent, would be, not to create a proportional amount of animal heat, because that is governed by the amount of oxygen consumed, but to increase in undue proportion, one of the chemical ingredients of our physical structure.

What are the pathological effects of this excess of non-azotized matter? And how does it operate in the production of fever? These are interesting questions to the Southern and Western practitioner, and deserve our closest investigation.

Prof. Liebig thinks he has settled the proposition in his "Animal Chemistry," that the Liver has a remarkable affinity for carbonaceous substances. He states that in inflammation of the liver, we find the blood loaded with fat and oil. This observation is corroborated by Dr. Stevens, to whom we are greatly indebted for much careful analytic investigation. Assuming this to be a fact, does this condition of the circulating mass give rise to the inflammatory action of the liver? or does this deterioration of the blood, and consequent disturbance of functional harmony, arise from perverted glandular action, growing out of a primary lesion of nervous energy? Here the long mooted question of fluidism and solidism—difficult to settle because from their direct and intimate connection—we cannot conceive of one being affected without implicating the other,—again presents itself. While we shall indulge in a little interrogative speculation, as to primary impression, we shall not attempt to separate this direct physiological connection.

Again, Liebig asserts it, as a universal fact, that the nitrogenized constituents of vegetable food have a composition identical with that of the constituents of the blood. He also asserts it as a well established truth, that when animals are fattened on food destitute of nitrogen, certain parts of their structure only increase in size. He instituted experiments on animals, and noted the result. Examples of geese are given, fattened in the method above alluded to. The result was, enlargement of the liver to three or four times its natural size, and a structure soft and spongy. From these facts we present the *apriori* argument, that an excess of carbon lies at the foundation of Hepatic diseases.

But the question may be asked here, why is it that Bilious and Intermittent fevers prevail more in some localities than others, in the same latitude and in the same season of the year? Our answer to this interrogatory is, 1st. In the warm summer months a predisposition to those diseases exists in any location. 2d. Every supposed favorable condition for the generation of Miasma is also favorable for the generation

of carbonic acid gas. Chemical analysis establishes the fact that carbon enters very largely into the constituents of all black vegetable loam. This character of soil is generally found in rich river bottoms, or in low marshy countries where those types of fever prevail. The decomposition of vegetable matter also furnishes an additional source of this element. We have then, 1st. The predisposition. 2d. The soil and decay of vegetable matter impregnating the atmosphere, which we are constantly inhaling, with a double proportion of the very same agent which develops the predisposition. Add to these exciting causes, such as sudden changes of the temperature, operating on an already relaxed and debilitated condition of the animal frame, want of healthy elimination and depuration, and a consequent interruption of the harmony of function, so essential to a normal condition of the fluids and solids of the body, and you have our answer to the interrogatory.

Another interesting question presents itself in connection with this subject. How do the preparations of Cinchona, operate in arresting a paroxysm of fever? Do they operate primarily on the blood by changing its chemical relations, which have been disturbed by the introduction of a foreign body? or on the Nervous Centres, and through them on the fluids of the body? The satisfactory solution of this question, it will be at once perceived, depends much on the settlement of that other question as to *primary* impression. If we subscribe to the clearly elaborated views of Dr. Stevens, and other able pathologists of the present day, that "in those fevers which arise from marsh miasmata, or from contagion, a diseased condition of the blood is the first which occurs in the train of symptoms, and the immediate cause of those which follow," then it is rational to suppose that our curative agents operate directly on this proximate cause. This view appears to be sustained also by the fact, that quinine is a very highly nitrogenized vegetable principle, having a composition identical with the constituents of healthy blood, and thereby furnishing the direct antidote to this perverted circulating mass. We might sustain this theory by much plausible argument. We might reasonably contend that the temperature, the vital activity, the renovation of all the organs are constantly maintained at the expense of arterial blood; that a normal condi-



tion of the solids, depends on the natural response of every surface, of every organ, to its natural, its healthy, and its appropriate stimuli. If the blood, therefore, be the fountain of life from which all the organs and tissues of the body are immediately formed, it follows that whatever deranges the nutritive process, by which the healthy condition of vital action is maintained, will produce derangement of function, abnormal action and disease. In its healthy state, blood contains definite quantities of oxygen, hydrogen, azote and carbon. An increased or diminished proportion of any of these constituents gives rise to morbid states of the vital current. Its vitality being diminished, every organ and every fibre suffers. The brain and nervous system, no longer supplied with good arterial blood, fail to perform their healthy functions. Hence the loss of balance between healthy nervous and vascular excitement. The harmony and order of the Physiological state, is rapidly succeeded by the "horrible discord" of the Pathological. A shattered and depressed condition of the nervous system exists; respiration is diminished; temperature of the body is reduced; there is loss of sensation, impaired memory, head ache, loss of appetite, nausea &c., followed by reaction, with all the characteristics of fever.

If carbonized substances, therefore, such as fat, oil, tallow, caffeine, asparagine, &c., as well as all non-azotized articles of food, are, as expressed by Prof. Liebig, "food for the liver," furnishing the elements by the presence of which that organ is enabled to perform its functions, may we not with equal justness conclude, that the brain and nervous matter are formed in a manner similar to that in which bile is produced, but requiring a different element. If the propositions be true, as set forth by this learned author, is it not a reasonable conclusion, that a change is effected in the composition and quality of the constituents of the blood, by the introduction of a highly nitrogenized compound, and that quinine operates as a direct stimulant or sustenent to the brain and nervous system, by entering the circulation, changing its chemical relations, and becoming converted into constituents of brain and nervous matter, and into organs of vital energy, from which the organic motions of the body derive their origin? If it be an undeniable truth, as alleged, that the substance of the brain and nerves, is drawn from the elements of nitrogenized vegetable food, and that a

depressed and perverted condition of nervous energy, grows out of a vitiated circulation, is there any thing absurd in the opinion that other constituents of vegetables, containing the chemical elements of medulary and nervous matter, may be applied to the same purpose?

In reviewing some old interrogatories, and raising some new ones, do not accuse me of wishing to deal in vain and idle speculations. I am in search of *facts*. A junior in my profession, I submit these suggestions to the criticism of my seniors. If I err, attribute it to my zeal to abandon speculation and hypothesis, for facts adduced from experiment and observation. This is the glory of Medical Science: the medical man is the man of induction, having opinions based on a broad range of facts and observation.

In presenting these views, I have no theory to sustain. To the *Chemical School* of Physiology we are largely indebted for many interesting facts in our Science; yet to the very first objection urged by the school of *Vitalism*, that organic and inorganic nature are distinct in many of their most essential attributes, no one can refuse his assent. We would not therefore, wrap up our Art in a kind of learned mystery, on the one hand, nor submit man, as charged by Prof. Paine, to the same laws which govern a stone, on the other. In the Investigation of Nature's laws, the man of Science should strive, with Lord Bacon, "to make wonders plain, not plain things wonders." What a noble rule for Physicians! By collecting facts they may serve to explain the train of phenomena, and devise a Theory which will develop the rationale of our Western fevers. Every fact, every well attested observation, will give us motives for searching into analogies, suggest new modes of observation and experiment, and may serve as a scaffold for the erection of general laws. Our science rests on many interesting and valuable facts; yet it must be confessed that our knowledge in the line of inquiry here presented, when compared with that of which we are ignorant, is extremely defective. An ample harvest for future laborers, yet presents itself. Let us strive to enrich our profession by gathering facts in this field of research.

## ARTICLE III.

*Amputation of the Superior Maxillary, Malar and Palate bones, for Disease of the Antrum. Recovery.* By DANIEL BRAINARD, M. D., Professor of Surgery in the Rush Med. Col.

On the 16th of May, 1846, I was requested by my friend, Dr. Philip Maxwell, of this place, to consult with him in the case of Mary Derry, wife of Philip Derry, of Aux Plaines, Ill. She is 40 years of age, of good constitution, and is not subject to any hereditary predisposition to disease.

Present state. Upon the left side of the face, there exists a tumor of the size of an orange, extending from the orbit to the angle of the mouth, and from the nose to the outer part of the cheek. It also projects downward into the mouth, effacing the alveolar process and projecting the cheek, but not encroaching upon the soft palate or extending to the median line of the mouth. Its surface is red and highly vascular, it is painful particularly beneath the orbit, is firm, but slightly and obscurely elastic.

History. Near four years since, Mrs. Derry began to be afflicted with "gatherings in her head," when, after having pain in the left side of the face and head three or four days, there took place a free discharge from the corresponding nostril, and the pain was relieved. This continued to recur from time to time, until the autumn of 1845, when the discharge ceased to recur, the pain, however, continuing and becoming more severe.

In Jan., 1846, she for the first time perceived a swelling of the cheek, and applying to a physician, he removed one or two teeth which were loose, telling the patient, she had an "ulcer tooth." From Jan. to the present time, the tumefaction and pain have increased, so that the patient obtained no rest without the use of anodynes. Since the first occurrence of the pain in her head, her general health remained pretty good until the autumn of 1845, when the menses ceased, and soon after, the pain and want of rest, induced considerable emaciation. All the principal functions of the system with the exception of those just mentioned, are performed with considerable regularity.

Operation. This was performed on the morning of the 23d of May, with the assistance of Drs. Maxwell & Herrick,

and in presence of Drs. Kimberly, Boone, Dyer, and several other physicians and medical students, as follows: The patient was placed upon a bed on her back, with the head raised. An incision was then made from the internal angle of the eye to the mouth, dividing the left half of the upper lip at its middle. Another was carried from the upper end of this, in a curve, to the external angle of the eye, and from this point to the eminence of the zygomatic arch. The integuments were dissected up so as to form a broad flap and entirely expose the tumor. This dissection was somewhat difficult, and required great care from the thinning of the skin, which had taken place over the most prominent part of the diseased structure. The lip and ala of the nose were then dissected up, and the incisor tooth next the median line extracted. The next part of the operation consisted in detaching the diseased mass. With a common narrow saw of the amputating case, introduced into the nostril, the alveolar and palatine processes of the superior maxillary bone, and the palate portion of the palate bone, were easily divided, as far back as the soft palate. The nasal process of the maxillary, the connexions of the malar bone to the external angular process of the os frontis, and zygomatic process of the temporal bone, were then divided with the bone scissors, leaving only a posterior bony attachment. To divide this a chisel about one inch wide was placed in the temporal fossa, and with a couple of blows of the hammer it was entirely loosened. It only remained to divide the soft tissues below the orbit and the veil of the palate, at its attachment to the bone, and the whole mass was removed.

Immediately a sponge dipped in cold water was thrust into the wound to arrest the hemorrhage, which was very abundant from a great number of small vessels. In a few minutes this was arrested, with the exception of that from the division of the internal maxillary artery at the bottom of the wound; this required the actual cautery. No ligatures were used. On examining the wound the pterygoid processes were found exposed, and no traces of the diseased tissue remaining. The flap was then brought in place, and retained by about a dozen stitches of interrupted suture. No other dressings were applied, lest by their pressure they should interrupt the circulation in the flap.

The time occupied in removing the tumor, was, from the commencement of the operation, not over from five to ten minutes. It was, however a severe one, and the patient, from the shock and loss of blood, was considerably depressed. Opium was freely given until pain and restlessness were allayed. This was required to be repeated for four days, in order to procure sleep at night. No unfavorable symptoms occurred; the flap adhered throughout by the first intention, and on the fifth day after the operation the menses returned. From this time there was no pain, her appetite and digestion were good, and at the end of a week from the operation, she was able to sit in a chair, walk about the house, and wash the wound herself. Healthy suppuration and granulation took place and on the 15th of June she rode home, about 12 miles, without difficulty, and I saw her there on the 16th, extremely comfortable in every respect.

On laying open the tumor it was found to be composed of a firm fibrous mass nearly as dense as scirrhus in its crude state. There were several small cavities in it, containing healthy pus, but no trace of bony structure. On the outside it was found to be circumscribed on every side by healthy structures, showing that the whole of the diseased mass was removed. A microscopical examination of the tissue showed it to contain "granules and nucleated cells," like those described and figured as characteristic of malignant growths. Under these circumstances, the return of the disease is of course greatly to be feared. The patient has been placed upon such a regimen as to guard as much as possible against this, and we may at least reasonably hope that its return may thus be so far retarded as to give a respite of several years, from so dreadful a malady.

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ARTICLE IV.

*Case of Mental Excitement allayed by Music.*

Mr. S—, a young man 17 years of age, of a strongly marked nervous temperament, and rather delicate constitution, had a severe attack of remittent fever attended with cerebral excitement, and followed by nervousness and general debility.

During convalescence, being fond of books, he commenced reading some poetical work, with which he became so much interested, as to continue its perusal six or eight hours, with little or no intermission. Nervous irritability and general febrile excitement, were, as might have been expected, almost the immediate consequences of this imprudent mental effort, and in a few hours after, a state of delirium, with symptoms very similar in every respect to mania à potu, rendered the case truly alarming.

The symptoms indicated, as it seemed, the prompt use of narcotics. Morphine was therefore given in doses gradually increased till at the end of 48 hours, 3 gr. at a time, with strong laudanum injections had been administered. This treatment seeming to have little or no effect, was abandoned, and other means, such as baths, counter irritants, stimulants, &c. &c., resorted to, with but slight amelioration of the alarming symptoms.

The patient had now continued in this state three days and nights, without sleep, and with little or no food. Pulse much of the time 120. Countenance anxious and sunken, presenting every appearance in fact, of approaching final prostration.

Of the means above mentioned, the administration of brandy, in often repeated and large doses, seemed to act most favorably and effectually. Under its use the pulse came down to about 100. The patient also became more quiet, and manifested a slight disposition to sleep.

At this time, it was suggested by the father, that his son had always manifested a remarkable fondness for music, and that when a child, sleep had often been produced by it.

A violin player was accordingly sent for, and the effect of his art tested upon the patient, with the most remarkable and immediate favorable effects. The nervous excitement began to abate at the sound of the fiddle, and in a very short time, the patient was in a sound sleep, from which he awoke in an hour or two much refreshed and nearly rational.

By continuing the brandy, and when nervous excitement began to manifest itself, an occasional quietus from the fiddle, this singular state of mental excitement was, in a few days, entirely and permanently subdued.

W. B. H.



## PART II.—REVIEW.

## ARTICLE V.

*On Diseases of the Liver.* By GEORGE BUDD, M.D., F.R.S., Professor of Medicine in King's College, London, and Fellow of Caius College, Cambridge. With colored plates and numerous woodcuts. Philadelphia: Lea & Blanchard. 1849. pp. 392. (From the Publishers.)

Diseases of the Liver are, doubtless, more common in the South and West than any other local affections, and it has been a great defect with our recently published bibliographical collections, and a source of regret and perplexity to our physicians, that whilst, of late, much valuable information has been disseminated with regard to the minute anatomical structure and healthy action of this organ, comparatively little has been written illustrative of its diseases, and pathological changes.

While modern authors have been very successful in availing themselves of the advantages afforded by important recent discoveries in anatomy and physiology, in treating of diseases of the nervous system, skin, kidneys, &c., the newly acquired information with regard to the structure and functions of the liver, seems not, till recently, to have served any very important purpose in enlightening us concerning its diseases.

It seems to us that Dr. Budd, in his work, the title of which we give above, has been most successful in his efforts to supply this deficiency, and, in our opinion, has furnished the profession with a monograph upon diseases of the liver, which, for perspicuity of style, sound scientific views, and methodical arrangement, is not surpassed by any of our best modern productions.

The most recent information concerning the structure and functions of the liver, not having been published in our text books, upon anatomy and physiology, in most common use, it is reasonable to suppose that many practitioners have not, as yet, had the means of acquiring this most important preliminary information. Dr. Budd, therefore, very wisely, as we think, previously to treating of individual diseases of this organ, gives us an introduction upon the "structure of the liver, upon the causes of the variations in its form, size, and

color, and upon the physical qualities and composition of the bile, &c."

The structure of the Liver may be described very briefly, as being composed of hepatic arteries, hepatic veins, portal veins, biliary ducts, with their respective capillary vessels, duly supplied with absorbants, all united together by a dense fibrous membrane.

Like all other secreting mucus membranes, that, lining the secreting tubes and the hepatic ducts, in which they terminate, is covered by a layer of epithelial cells, by which the biliary matter is eliminated or separated from the blood circulating in the portal capillaries.

As to the distribution of blood vessels in the liver, it may be remarked that the portal vein enters the concave surface of the organ, and, after dividing and subdividing into numerous branches, breaks up at last, into innumerable very minute capillary vessels, to form an intricate network around the secreting epithelial cells, the blood not employed by these cells, to form bile, passes into other minute vessels,—the capillaries of the hepatic veins,—and from thence to the right side of the heart, to mingle with the systemic blood.

It appears then, that the capillaries of the portal vein, terminate in those of the hepatic, and that this net work of minute vessels, serves as the medium of connection between them.

This vascular plexus, situated between the termination of the portal and commencement of the hepatic vein, is separated into lobular masses by the larger blood vessels and hepatic ducts. These lobules, thus formed, together with the biliary ducts, and their secreting epithelial cells, constitute the so called, lobules of the liver.

Each of these lobules has its exterior composed, principally, of biliary ducts and branches of the portal plexus, having a small hepatic vein with its capillaries originating in its centre. This arrangement of vessels enables us by the appearance of the lobules, to distinguish between congestion of the hepatic and portal veins, and to detect, also, the undue accumulation of bile in the hepatic ducts.

In diseases of the liver, caused by obstruction to the passage of blood through the hepatic veins, the lobules present a dark vascular centre, with a yellowish or light colored circumference; an appearance produced by an accumulation of blood

in the capillaries of the hepatic vein, and a comparatively empty condition of the portal plexus and minute biliary ducts. On the other hand, in congestion of the portal veins and their capillaries, the dark vascular rings, surrounding light colored centres, presented by the lobules, indicate, not an obstruction to the passage of blood through the hepatic veins, but an accumulation of it, in the vena portarum and its branches. Obstructions to the passage of bile from the liver, and a consequent accumulation of it, in the hepatic ducts, cause the whole organ, but especially the exterior of the lobules, where these minute ducts are most numerous, to present a dark yellow appearance. Thus it is seen that obstruction to the passage of fluid, may take place in either of the above named three classes of vessels, causing hepatic venous, hepatic portal, or hepatic biliary congestion, each depending upon its own cause, and producing its peculiar pathological changes and appearances.

The hepatic artery, upon entering the liver, divides into numerous branches, which are distributed, largely, to the coats of the blood vessels, and in great numbers to the hepatic ducts, gall bladder, cystic, and common ducts. The arterial blood, thus distributed, is taken up by small branches of the portal vein, and, like that from the gastric, splenic, superior and inferior mesenteric arteries, passes in the liver, through a second set of capillaries, the portal plexus.

It is the opinion of most physiologists, founded, partly, upon this anatomical distribution of vessels, that the arterial blood of the hepatic artery serves as nutriment for the liver, and that the venous blood of the portal vein, furnishes the material for its secretion.

Having given the above brief description of the distribution of the vessels of the liver, we will now pass to the consideration of some of the other elements of its structure.

As before remarked, the meshes of the portal plexus or spaces between the vessels which constitute the lobules, are filled up with numerous nucleated secreting cells. The language of our author upon this subject is not susceptible of abridgment and may therefore be quoted. Concerning the structure and functions of these cells, he remarks as follows:

"The cells are flattened, irregular in form, but somewhat

spheroidal, and have each a nucleus, which again contains a central pellucid spot, the nucleolus. Some cells have two nuclei.

"The cells are of various sizes. The largest are usually about the one-thousandth of an inch in diameter. Others are very much smaller, as if not yet fully developed. In some livers the cells, generally, are smaller than in others.

"The cells contain oil-globules and amorphous granular matter. Their colour and transparency depend on the colour and quantity of the matter they contain, which vary very much in different cases. They are usually of a light brown and almost transparent, but in some subjects we find them yellowish and opaque.

"If, while looking at this mass of nucleated cells, we imagine the delicate and now invisible capillaries to be filled with blood, or coloured size, and thus rendered conspicuous, we shall perceive that the whole liver, excluding the canals in which the portal and hepatic veins run, is a solid plexus of capillary blood-vessels, the meshes of which are filled with nucleated cells.

"The mucous membrane of the gall-bladder and ducts, like the excreting ducts of other glands, in fact, like all mucous membranes, and the skin itself, is composed, as Mr. Bowman has shown, of an extremely thin, transparent membrane, without pores or visible structure, whose external or secreting surface is coated with nucleated cells. These cells by their apposition and union, form a kind of pavement on the transparent membrane, which serving as their basis of support, has for this reason been named by Mr. Bowman, the *basement-membrane*. The blood-vessels, lymphatics, and nerves ramify on the opposite, deep, or inner surface of the basement-membrane."

"The researches of Purkinje, Henle, Bowman, and Good-sir, leave no doubt that the nucleated cells are the immediate agents of secretion.

"It is not in the liver only that the cells perform this office, for it seems established as a general law, and it is certainly one of the highest and most interesting which the study of minute structure has yet disclosed—that all true secretion, whether in animals or in plants, is effected by the agency of cells; that, 'however complex the structure of the secreting organ, these nucleated cells are its really operative part.' In each secreting organ, the secreting cells have a peculiar power to form, or to withdraw from the blood, the secretion proper to the part.

"In such of the glands of animals as have excreting ducts, the nucleated cells withdraw from the blood the peculiar principles of the secretions, which they elaborate more or less, and then, in one way or another, whether by bursting or dis-

solving, or by some unknown mode, discharge them through the excreting ducts.

"The evidence of this is, perhaps, as clear in the liver as in any of the glands.

"On examining the nucleated cells of the liver under the microscope, we see that most of them enclose small spheroidal globules, which are recognized by their dark outline, or high refractive power, to be globules of oil or fat.

"In ordinary livers these oil or fat globules are small, and few in number; but in the fatty condition of the liver, so often found in persons dead of phthisis, and in that induced by keeping animals exclusively on fatty substances, they are so large and numerous as to distend the cells to double their natural size, and consequently to cause a great increase in the volume of the liver."

Having described the most important parts which constitute the liver, it remains to say a few words concerning its areolar tissue and lymphatic vessels.

The areolar tissue seems to connect together and protect the more important elements of the organ, and in man, is spread out over its whole surface, and by forming tubes, called portal canals, surrounding the ducts and portal veins, extends into its interior, constituting the medium of connection between its different parts. This structure is interesting in a pathological point of view, as will be seen hereafter, on account of its being the part primarily and principally effected in cirrhosis.

As for the lymphatics, those which are superficial, ramify in the proper capsule of the liver, and the deep seated ones, in the portal canals.

"Having examined the structure of the liver, we may next consider the composition and uses of the bile.

"We have seen that the nucleated cells in the lobules of the liver withdraw from the blood the principles of their secretion, which they probably elaborate in some degree, and then discharge into the ducts. In its passage through the ducts, the matter secreted by the lobules becomes mixed with that secreted by the ducts themselves, which, if we may judge from the large quantity of blood the ducts derive from the hepatic artery, and the numerous involutions of their mucous membrane, must be considerable in quantity. Secretion is always going on, both in the lobules and in the ducts, and the compound fluid derived from these two sources probably passes continuously along the ducts as far as the junction of the hepatic duct with the cystic.

"When the stomach and duodenum are empty, part only of the bile flows along the common duct into the duodenum; the remainder passes down the cystic duct into the gall-bladder.

"During digestion, on the contrary, the gall-bladder contracts, and part of the bile accumulated in it, together with all that brought by the hepatic duct, is poured into the duodenum.

"In the gall-bladder, the bile loses, by absorption, some of its most watery parts, and is further modified by the addition of the proper secretion of this cavity."

"The bile, in man, has been supposed to be ultimately derived from two sources. It is clear enough that, in most circumstances, a large proportion of the proper principles of bile are derived from the waste of the body, and are a product of the metamorphosis of the tissues and of materials stored away in the system. In the carnivora, in the hybernating animal in its winter sleep, and in the fœtus, these materials must be its only source. And under certain conditions, the same must be the case in man also. In protracted abstinence, for example, bile continues to be formed, and often in large quantities. Here, the living tissues gradually waste away, and their materials are discharged in the excretions. The three principal outlets at which they make their appearance, are the liver, the lungs, and the kidney. Nitrogen predominates in the compounds which escape through the last-named organ, while the two former separate principally hydrogen and carbon. But while the liver and lungs have thus much in common, there is this important difference between them; that in the lungs, the hydrogen and carbon pass off *burnt*—that is, in combination with oxygen, as water and carbonic acid,—while, in the liver, they escape uncombined with oxygen, and still combustible. From which it would appear, that the larger the amount of these elements discharged by the lungs as water and carbonic acid, the less, *ceteris paribus*, must remain *unburnt* to form constituents of bile. So that here, we already meet with a fundamental and important relation between the secretion of bile and the great function of respiration. I shall not, however, dilate upon this topic now, as in endeavouring to follow the bile to its final destination, we shall again have to consider relations of a similar kind."

It is also probable, that in man, and in all animals which live on a mixed diet consisting largely of combustible matters, such as starch, sugar, alcohol, and other compounds destitute of nitrogen, these substances, also, contribute to the elements of the bile.

With regard to the part the liver performs in the animal body in secreting bile, it may be remarked, that physiologists,



though much better informed than formerly upon this subject, are still unsettled in their opinions. One of the principal effects of the action of the liver in secreting bile is, evidently, to purify the blood, by separating from it noxious and effete principles.

"It will be remembered that all the blood sent to the stomach and intestines, has to pass through this organ before it can again mix with the venous blood from other parts of the body. Now the blood that has come from the stomach and intestines must necessarily be charged with many impurities besides those derived from the mere decay of the tissues. Along the extensive mucous tract, with which every thing we eat or drink is brought in contact, absorption is constantly going on, and various matters must, therefore, enter the portal vessels, not fit by their nature to form blood, or to serve any other purpose in the body. Many of these substances are removed from the blood in its passage through the liver. The discharge of such matters through the liver, when they are in unusual quantity, or of a particular kind, is, no doubt, the primary condition of many biliary disorders.

"But the bile is far from being a merely excrementitious fluid. Arrived in the intestine, it has important offices to serve, as indeed might already be surmised from its being poured into this canal so near its upper end. These offices are related to the function of digestion on the one hand, and (according to Liebig) to that of respiration on the other."

The bile is supposed to assist in digestion, by uniting by means of its alkaline constituents, with oils and fats, forming with them a kind of soap which is soluble, and also by means of the same principle, to neutralize the acid which passes from the stomach, after having performed its part in the process of digestion.

Another object of the bile is, doubtless, to promote the discharge of the contents of the intestines, by acting as a natural purgative. This is evident, from the fact, that an excess of bile is attended by diarrhea, and a deficiency by constipation.

"We have next to consider the final destination of the bile itself. It seems clear that, in man, under ordinary circumstances, the bile which is evacuated by the bowel, can be but a small proportion of the whole amount secreted. For the quantity thus voided is very trifling, and consists chiefly of its colouring matter. The remainder, and larger part, must, therefore, be re-absorbed. Liebig states, that, in the carni-

vora, the whole of the bile is re-absorbed. The excrements of these animals contain neither bile nor soda; for water extracts from them no trace of any substance resembling bile, and yet bile is very soluble in water, and mixes with it in every proportion. It has been lately advanced by Liebig, on the authority of quantitative analysis, that the portion of bile re-absorbed, is eventually discharged through the lungs as carbonic acid and water; thus supplying fuel for respiration and supporting animal heat."

"Thus it appears, that the relation of bile to respiration is direct and fundamental. Fortunately, the activity and effects of the respiratory process are largely under our control. In the vast power we have of modifying these by appropriate regulations, having reference to the great conditions of air, exercise, temperature and food, we have means much more effectual than any other, in dealing with biliary disorders.

"Of these disorders, on the other hand, the neglect of such regulations is by far the most fruitful source.

"Thus, for example, may be explained many of the bilious disorders of hot climates. If, in such climates the food be not regulated in accordance with the smaller needs of the economy as to animal heat, an excess of bile is formed, and disorder of the stomach and intestines—bilious vomiting, and diarrhoea—are the consequence.

"Hence, also, the general repugnance to rich meats, and the greater tendency which these and spirits unquestionably have to produce disease of the liver, in hot seasons and in tropical climates.

"In the same way may be explained the greater frequency of bilious disorders in middle life, when men begin to take less exercise, and their respiration becomes less active, while on the other hand, the tendency to indulge at table but too often increases."

In the preceding remarks we have, as far as space will permit, given an exposition of the facts and principles laid down in our author's introduction. We shall now proceed to give a brief synopsis of his views and opinions with regard to individual diseases, as expressed in the following chapters.

Congestion of the liver is the morbid condition of the organ first treated of, and is described as being very common, from the fact, that it is composed mostly of vessels, and has circulating through it, a large proportion of blood, the portal, already retarded by its passage through one set of capillary vessels.

Congestion may take place in the hepatic or portal veins, or in the hepatic ducts. When from organic disease of the

heart, or acute disease of the lungs, the course of the blood through the chest is impeded, there is, always, congestion of the hepatic veins.

The liver in such cases presents different appearances, according to the degree of congestion.

"In slight degrees, the twigs of the hepatic vein and the capillaries that terminate in them, are found, after death, turgid with blood, while the portal twigs, and the capillaries that immediately spring from them, are empty. A section of the liver presents, in consequence, a mottled appearance. The central portions of the lobules, where the vessels are congested, form isolated red spots, while the margins of the lobules, where the vessels are empty, have a colour which varies from yellowish-white to greenish, according to the quantity of oil-globules and of colouring matter which the cells contain. This appearance has been termed by Mr. Kiernan, the first stage of *hepatic-venous* congestion. When the course of the blood through the heart or lungs is impeded, the hepatic veins and the capillaries that open into them are naturally the first to become turgid.

"In a further degree of congestion, more of the vessels forming the capillary network are filled of course in a direction backward, towards the portal vessels. The congestion extends from lobule to lobule, at those points where the adjacent lobules are connected by their capillaries; and when the congestion has nearly, but not quite, reached those twigs of the portal vein that go to define the lobules, all the capillaries of the lobules will be injected, excepting those immediately surrounding the portal twigs. A section of the liver will still present a mottled appearance, but now the pale portion will be in spots, where the uninjected twigs of the portal vein are divided, and the red portion will form a band continuous throughout the liver. This appearance is what Mr. Kiernan has called the second stage of *hepatic-venous* congestion.

"A liver congested to this degree is enlarged from the large quantity of blood it contains; and, as Mr. Kiernan has remarked, it is frequently at the same time in a state of *biliary* congestion. The biliary congestion is an accumulation of biliary matter in the lobules of the liver, giving the uninjected portions of the lobules a deeper yellow or greenish tint than is natural to them. It seems to be a consequence of the congestion of the blood, and is produced perhaps in a great measure by impediment to the free escape of the bile through the small ducts, from the pressure exerted on them by the distended vessels."

"When obstruction takes place to the circulation through the

chest, but more particularly when the heart becomes over-distended with blood, we observe the countenance gradually assume a dingy aspect, in which the purple suffusion of carbonized blood is mingled with the yellow tint of slight jaundice: the conjunctiva is more decidedly tinged: and if the disease continue long, sometimes completely prevails over the purple tint.'

"This jaundiced tint of the complexion, co-exists with a jaundiced condition of the liver itself, or, as Mr. Kiernan expresses it, with *biliary congestion* which has already been noticed as sometimes consequent on sanguineous congestion.

"If the biliary congestion be long kept up, the function of the cells in the congested lobules is arrested, or rendered less active, and the cells become perhaps impaired in their vitality and powers of reproduction. The liver is permanently injured in its secreting element, as it is when the common duct has been long obstructed.

"Andral and most other writers have remarked that congestion of the liver from a mechanical cause, when long continued often leads to organic disease of the liver; and they have explained in this way the frequent association of organic disease of the liver with organic disease of the heart."

"There is little to be said on the treatment of mechanical congestion of the liver. The congestion is the consequence of another disease, and the treatment which relieves the latter, will diminish the congestion. When the congestion depends on obstacle to the circulation through the heart, the proper remedies are those,—such as bleeding, purgatives, diuretics, rest,—which most effectually relieve the heart. When the liver cannot free the blood from the principles of bile, or the skin becomes sallow, the patient should carefully abstain from rich meats and fermented drinks, which would render the liver still more inadequate to its office, and increase the bilious disorder."

"In congestion of the liver from disease of the heart and lungs, the hepatic veins, being nearer the seat of obstruction, in the course of the circulation, than the portal veins, are naturally the vessels first distended;—and when the congestion is partial, the hepatic twigs, and the capillaries that immediately surround them, are found after death, to be the full vessels; the portal twigs, and the capillaries that immediately spring from them, the empty ones.

"But now and then, the portal veins, and the capillaries immediately springing from them, are found alone congested. The margins of the lobules, and the interlobular spaces are then of a red colour—forming a continuous red band—while the centres of the lobules appear as isolated pale spots.

"Mr. Kiernan has applied to this congestion of the portal veins only, the term, *portal-venous congestion*. From the pale

uninjected portion being in isolated spots, it looks very like the second stage of hepatic-venous congestion. It is remarked by Mr. Kiernan, that the injected substance never has the deep red colour that it has in hepatic-venous congestion."

Inflammatory diseases of the liver are next treated of by the author.

The old division of this class of diseases into acute and chronic is, in his opinion, faulty, from the fact, that those attacking the exterior of the organ, being productive of more tenderness and pain, are termed acute; whilst others, no less rapid in their course being deeply seated and consequently less tender and painful, are termed chronic.

The classification of inflammatory diseases is as follows.

1. Suppurative inflammation or that which leads to supuration and abscess.
2. Gangrenous inflammation.
3. Adhesive inflammation, or inflammation which causes effusion of coagulated lymph.
4. Inflammation of the veins of the liver.
5. Inflammation of the gall bladder and ducts.

The first mentioned or suppurative inflammation and abscess of the liver may be caused, either by blows or other mechanical injury, by suppurative inflammation of veins, or by ulceration of parts from which blood returns through the liver.

Inflammation and abscess of the liver from external violence is so rare, and the treatment in such cases so obvious, that we will remark, merely, that its usual seat is upon the convex surface of the right lobe, and that the rarity of inflammation and abscess from accidental injury, shows how effectually the liver, when of its natural size, is shielded by the ribs.

"A second, and far more frequent cause of abscess of the liver, is suppurative inflammation of some vein, and the consequent contamination of the blood by pus."

"The mode of formation of these abscesses is well illustrated by an experiment made more than half a century ago by Dr. Saunders, and related by him in his admirable work on the structure and diseases of the liver. He injected 3ij of quicksilver into the crural vein of a dog. No ill effects were observed the first day, but at the end of this the dog became feverish, and after two or three days had cough and difficulty of breathing, which continued until its death. On examina-

tion after death, Dr. Saunders found the lungs studded with small indurated masses, which he calls tubercles, and small circumscribed abscesses. In the centre of each was a small globule of mercury.

"Here, the globules of mercury, like the globules of pus in purulent phlebitis, became arrested in the capillary vessels of the lungs, and each globule, acting perhaps by mere mechanical irritation, excited circumscribed inflammation and abscess. The inflammation was circumscribed, because the irritation that excited it, acted only at particular points.

"In the dog experimented on by Dr. Saunders, the lungs were the only organs in which abscesses were found. The reason of this is obvious. All the mercury, conveyed directly to the lungs, became arrested in their capillaries. No globules passed through to cause inflammation and abscess of other organs.

"In the same way, in some cases of purulent phlebitis consequent on injury of the head and limbs, or on amputation, abscesses are found in the lungs only; and they are usually found in the lungs in greater number than in other internal organs. After the lungs, the liver is the organ in which they are most frequent; a circumstance attributable, in some measure, to the large quantity of blood that flows to the liver, and to the slowness of the current through its capillary network; but, perhaps, still more, to those vital or other attractions by which matters of particular composition are there detained and excreted."

"There is a close analogy between the secondary abscesses from phlebitis, and secondary masses of cancer.

"A cancer of the breast may be the source of cancerous tumours in the lungs and liver, just as an inflamed vein in the arm may be the source of abscesses in those parts.

"The abscesses and the secondary cancerous tumours will be scattered in the same manner, and immediately surrounded by healthy pulmonary or hepatic tissue.

"The lungs and the liver are the organs in which secondary cancerous tumours, as well as the abscesses from phlebitis, are most frequent.

"The cancerous tumours and the abscesses have in each organ the same form and seat; and in the lungs, both have a great predilection for the surface.

"These points of resemblance can hardly be explained, except on the supposition that the germs of the two diseases, —cancer-cells and pus-globules,—are disseminated in the same manner through the veins."

"The veins that feed the vena portæ, are little exposed to accidental injury, but some of their branches are divided in operations on the rectum and for strangulated hernia; and, as



might have been anticipated, these operations are sometimes followed by abscess of the liver.

"Crüveilhier relates a case where abscesses of the liver were immediately consequent on repeated attempts to return a prolapsed rectum.

"The patient, a man of sixty, had been subject to prolapsus many years. The bowel protruded at the first effort to empty it, but was usually returned without difficulty. When he sought assistance on the last occasion, it had been down twenty-four hours, and was replaced only after repeated and violent attempts, which gave him much pain.

"The same day the expression of his countenance altered, and his pulse became small and unequal. He soon fell into a state of prostration, with a cold skin, vomiting, hiccough, stupor, but without pain, and died on the fifth day.

"A great number of small abscesses, some superficial, others deep-seated, were found in the liver. The hepatic tissue for a short distance round each of them was of a brown slate colour and softened. (Cruv. liv. xvi.)

"Dance mentions a case in which abscesses formed rapidly in the liver after an operation for cancer of the rectum, where cauterization was practised; another, in which they were consequent on a simple operation for fistula; two others, in which they follow the operation for strangulated hernia, where a portion of irreducible omentum suppurated externally. (Archiv. Generales, t. xix. p. 172.)

"There can be little doubt that in all these cases, the abscesses in the liver were the consequence of phlebitis caused by the operations."

The remaining causes of suppurating inflammation and abscess of the liver, are, as stated above, "ulceration of the large intestine, or more generally, of the intestines, the stomach, the gall-bladder or ducts; parts which return their blood to the portal vein, to be thence transmitted through the capillaries of the liver."

One of the diseases most frequently attended with ulceration of the intestines is dysentery, and it appears from numerous cases cited by our author, that whenever, in this disease, there is ulceration of the intestinal mucus membrane, abscess of the liver is also found.

Upon this subject he remarks:

"A connection between abscesses of the liver and dysentery has long been noticed, but the two diseases are associated far more frequently than has been generally imagined. Of the twenty-nine cases recorded by Annesley, there are twenty-one, or nearly three-fourths, in which there were ulcers, more

or less extensive, in the large intestine; and two other cases, in which the large intestine was contracted or strictured, in consequence, no doubt, of dysentery at some former period. It is not unlikely that in some of the remaining cases, ulceration of the intestines existed but was not noticed.

"Of the fifteen fatal cases which fell under my own observation at the Dreadnought, the state of the intestines was not noticed in two. In eight of the remaining thirteen cases, there were ulcers in the large intestines, and in one other case, two ulcers in the stomach; so that, in nine of thirteen cases, or in nearly three-fourths, there were ulcers in the large intestine or stomach. In another of these cases, without ulceration of the stomach or intestine, there was ulceration of the common gall-duct."

After recording numerous other cases of dysentery attended by abscess of the liver, our author remarks, that "the association of dysentery with abscess of the liver, is noticed by most physicians who have treated of either of these diseases," and that "it is impossible to suppose that this is a mere coincidence of disease having no relation to each other."

Upon the manner in which the ulcerated mucus surface acts to produce hepatic abscess, his language is as follows:

"Admitting dysentery, or ulceration of the bowel, to be a source of abscess of the liver, it is obvious that the liver does not become involved by spreading of the inflammation, but by some contamination of the portal blood.

"This may be either by *pus*, formed by suppurative inflammation of one of the small intestinal veins; or by matter of other kind resulting from softening of the tissues; or by the fetid gaseous and liquid contents of the large intestine in dysentery, which must be absorbed and conveyed immediately to the liver. It seems probable, that contamination of the first kind usually gives rise to small scattered abscesses; of the last, to diffuse inflammation, and a larger, perhaps single, collection of pus. If the morbid matter be such, that it does not mix readily with the blood—as globules of pus or mercury—it will cause small, circumscribed abscesses, the rest of the liver being healthy. If, on the contrary, the morbid matter be readily diffusible in the blood, all the blood will be vitiated, and diffuse inflammation result.

"The admission of this explanation of the relation of abscess of the liver to dysentery, would lead us to expect that abscess of the liver might occasionally be consequent on ulceration of the stomach, or gall-bladder,—parts, which, like the larger intestine, return their blood to the portal vein,—and this is found to be the case."

As to symptoms it is stated that they are generally much more obscure than they are represented to be in books upon this subject. "A picturesque group is sketched, which it seems very easy to identify, but in actual practice it is far otherwise."

"We can only infer that abscesses are forming in the liver by the occurrence of *special* symptoms—pain in the region of the liver and jaundice—in the midst of the general disorder. But these special symptoms do not exist in all cases. There may be no jaundice; and pain, even, may be wanting, or the typhoid state into which the patient falls may prevent his distinctly perceiving or expressing it. In such cases, the abscesses in the liver can be discovered only after the death of the patient.

"In the same way, when inflammation of the liver occurs during the acute stage of dysentery, or on a recurrence of acute symptoms in chronic dysentery, the general symptoms do not aid us in discovering it, because they are fairly attributable to the primary disease. The diagnosis must be founded on local symptoms chiefly—pain and tenderness referable to the liver, tension in the right hypochondrium, and jaundice. Our knowledge of the connection between the two diseases enables us to attach due importance to these symptoms, and ascribe them to their actual cause. Pain and tenderness in the region of the liver, slight increase in its volume, and jaundice, which, in other circumstances, might excite little alarm, and be attributed to their most frequent cause,—inflammation and abstraction of the gall-ducts,—when they occur in the course of dysentery, will lead us to dread suppurative inflammation and abscess."

"The *treatment* of suppurative inflammation of the substance of the liver is very unsatisfactory.

"When the inflammation is caused by phlebitis consequent on a wound or injury of the head or limbs, the whole mass of venous blood is contaminated by pus, suppurative inflammation is likewise set up in many lobules of the lungs, perhaps in some of the joints, and, it may be, in various other parts of the body; and the patient soon falls into a typhoid state, which bleeding and other lowering measures would only make worse. The inflammation thus excited passes rapidly on to suppuration, and we have little, if any, power to arrest it.

"The chief objects of treatment should be, to prevent, where this is possible, the passage of any more pus into the blood from the injured part, and to support the strength of the patient.

"When suppurative inflammation of the liver is caused by a blow, the lungs and other organs do not suffer as in puru-

lent infection of the blood: neither are they thus implicated, when it is induced by ulceration of the stomach, or intestines, or gall-bladder, since, in these cases, the noxious matter which excites the inflammation, is detained in the liver or drained off through it. Here, the strength of the patient is not so profoundly sunk, and we may hope by means of depletion, especially local bleeding, to control the inflammation, and limit its extent; and, by rendering the abscesses smaller, to protract, at least, the patient's life. In some cases we may, perhaps, by active measures employed early, prevent matter from forming, but we have no evidence that this can be done when the inflammation is caused by pus, and is the consequence of inflammation of one of the veins that return their blood to the portal vein.

"In this country, mercury has generally been resorted to, when the local symptoms have led to the suspicion that the liver was diseased; but I fear, with no benefit to the patients. It has been well observed by Abercrombie, "In the liver diseases of this country, mercury is often used in an indiscriminate manner, and with very undefined notions as to a certain specific influence, which it is supposed to exert over all the morbid conditions of this organ. If the liver be supposed to be in a state of torpor, mercury is given to excite it; if in a state of acute inflammation, mercury is given to moderate the inflammation and reduce its action."

"This indiscriminate use of mercury has resulted from its unquestionable efficacy in some derangements of the liver, and from the difficulty of distinguishing the different disorders of this organ. In doubt as to the real nature of the malady, the practitioner is naturally anxious to give his patient the chance of a remedy that occasionally produces marked benefit; but often, in doing so, aggravates the disorder it is his object to relieve.

"This misapplication of mercury will continue until the various diseases and derangements of the liver are better discriminated, and practitioners have ascertained those in which mercury has a curative influence. There can be no doubt, that much of our uncertainty as to the action of this and other medicines, arises from our confounding under the same name, and treating in the same manner, diseases that spring from different causes, and are essentially different in their nature.

"It seems to me that mercury is peculiarly unsuited to the disease we have been considering—suppurative inflammation of the liver.

"One objection to its employment in this disease, is the short time allowed for its action. When the inflammation is consequent on a wound or injury, and also, in all probability, when it occurs in the course of dysentery, it passes on to suppuration in two or three days; and when suppuration has once

taken place, and abscess has formed, it is agreed by all who have had experience on the subject, not only that mercury does no good, but that in whatever quantity it be given, it fails to produce its usual constitutional effects. This fact, singular as it may appear, seems to be fully established. Annesley says, 'There can be no doubt that the system will not be brought under the full operation of mercury, or that pytalism will not follow on the most energetic employment of this substance, where abscess exists.'

"He repeats this opinion again and again, and even considered resistance to the action of mercury, a proof that abscess had formed in the liver.

"It is only, then, before suppuration has taken place, that mercury can do any good, and during this time, from the presence of high fever, the system is with difficulty affected by it.

"When abscesses have formed and become encysted, the time for active treatment by medicine has of course passed away. The wisest course, then, is, I believe, merely to regulate the bowels by rhubarb, or rhubarb and aloes, to recommend habits of strict temperance, and, where the circumstances of the patient allow, residence in a mild climate. If the complexion be sallow or dusky, the nitro-muratic acid, as recommended by practitioners in India, will often be productive of benefit. Whenever there is reason to infer, from increase of pain and fever, that fresh inflammation is set up within the cyst, and that the abscess is growing larger, blood should be taken from the side by leeches or cupping, or a blister should be applied there.

"Many physicians have recommended that abscesses of the liver should be opened; but there is much danger in the practice."

Gangrenous inflammation of the liver is next treated of.

This disease is not common, but when cases do occur, they are found generally, if not always, to be produced by morbid matter transmitted to the organ in the blood from other parts affected with gangrene.

In support of this conclusion several cases are related, one in which abscesses in the liver and lungs followed a contused wound of the finger; another in which mortification of the toes from cold, caused rigors and typhoid symptoms, death on the sixth day, gangrene of the liver, the lungs and spleen, ulceration of the pharynx, and a deposition of pus in the shoulder joints.

"In this case the existence of gangrene, both in the liver

and in the lung, was clearly shown by the defined line surrounding the gangrenous portions.

"The source of the mischief here was, no doubt, the gangrene of the toes produced by cold. The man was in the prime of life, of spare habit, muscular, florid, and in good health at the time of the frost bite. The case shows us what a serious thing a small patch of gangrene, in any part of the body, may become.

"The dissemination of the gangrenous masses—the existence of a number of them *isolated and at a distance from one another*—proves that the septic agency was conveyed by the blood. The noxious matter, thus disseminated, destroyed the vitality of the tissues on which it acted most strongly.

"The chemical theory of these septic changes is now well known. All parts in which they are taking place, have a tendency to affect other parts brought into contact with them, with the same mode of transformation. The case just related—and it is by no means a solitary one,—offers one of the most interesting illustrations of this theory in the whole range of pathology. But, whatever be the explanation adopted, the fact is certain, and it is one of extreme importance, that gangrene of the extremities, or of any part of the surface of the body, produced by cold, by pressure, or in any other way, has a tendency to infect other and remote parts of the body with the same change."

"It is in this way, in effect of gangrene of some other part, that true gangrene of the liver is most frequently produced. Rokitsansky states, that he has several times observed gangrene of the liver, *in connexion with gangrene of the lung*; and has never found it without gangrene of some other part."

*Adhesive inflammation* of the capsule, and of the substance of the liver, and *cirrhosis* are the consequences of inflammation which causes an effusion of coagulable lymph.

"When lymph is effused in greater quantity on the surface of the liver, it causes adhesion of greater extent; and if any of the lymph fall down among the intestines, it will glue adjacent folds of the intestine together.

"When abscess excites adhesive inflammation of the *substance* of the liver, the lymph can never be diffused in this way. It all remains, where first deposited, immediately around the abscess, and forms a cyst for the matter."

"Deep-seated adhesive inflammation of the liver produces different effects, according to the parts it principally involves. Sometimes the lymph is effused almost exclusively into the areolar tissue in the portal canals of considerable size, and if the person die long after this has occurred, all the considera-



ble branches of the portal vein are found surrounded, in some places to a distance perhaps of half an inch, by new fibrous tissue, which by its contraction has drawn in and puckered the adjacent portions of the liver. The remaining portions of liver may be little, if at all, altered in texture, and may be readily scraped away from these indurated portions. The main branches of the vein are pervious, but many of the small twigs that spring from them are obliterated. The parts which these twigs supplied are atrophied, and the liver proportionally reduced in bulk. Where such portions are near the surface, the capsule is somewhat drawn in and puckered. Together with these changes, there are usually, if not always, thick false membranes on the capsule of the liver, or extensive adhesions, by means of old tissue, between the liver and adjacent organs. Usually, too, there are old false membranes on the surface of the spleen, and marks of adhesive inflammation of other parts, especially the pericardium and the pleura.

"I have several times met with this form of disease in persons who had drunk hard of spirits. It comes on with well-marked symptoms of inflammation of the liver,—pain in the side, vomiting, fever, and perhaps jaundice. These symptoms subside after a time, but the patient does not regain his former health. The liver has been permanently damaged; part of its secreting substance becomes atrophied from closure of the small portal veins, and it is no longer adequate to its office. The patient has difficult digestion, looks sallow, and does not recover his former strength."

"In other cases of deep-seated adhesive inflammation of the liver, the lymph is not effused solely, or chiefly, in the large portal canals. We do not find the fibrous tissue about the large branches of the portal vein especially, but about the small twigs that separate the lobules. All the substance of the liver is rendered tough by this new fibrous tissue, which, when the liver is sliced, is seen to form thin lines between small irregular masses of lobules. At the parts on the surface of the liver which correspond to these lines, the capsule is drawn in, so that the surface has a 'hob-nailed' appearance."

"The tissue of the liver is paler than natural, from the presence of this white fibrous tissue, and from its containing but a small quantity of blood; and it is often yellowish from accumulation of biliary matter in the cells. When this is the case, a section has the grayish and yellow colour of impure bees-wax, and, in consequence, the disease has been called by the French, *cirrhosis*."

"*Causes.* There are perhaps various conditions capable of producing, or that may help to produce, the different forms of adhesive inflammation of the substance of the liver under consideration, but the most common and most powerful cause in

this country, indeed the only cause whose influence is apparent, is spirit-drinking."

"The inflammation of the areolar tissue in the portal canals is probably owing to the diffusion of alcohol through it from the portal veins. We can readily fancy such diffusion taking place, if we consider how volatile alcohol is, and how readily it permeates animal membranes and tissues. These properties of alcohol also explain the circumstances noticed by most pathologists, that in cirrhosis the *whole* liver is changed in structure, and the different parts of it generally in pretty equal degree.

"If globules of mercury or of pus find their way into the veins that feed the vena portæ, they become arrested at particular *points* in the lobules of the liver, and excite at each of those points circumscribed inflammation and abscess, while the rest of the liver may continue healthy; but alcohol, being volatile, and mixing readily with water, becomes equally diffused through the whole mass of portal blood, flowing through the liver, and the inflammation it excites involves in consequence the entire organ."

"*Symptoms.*—Cirrhosis usually comes on very insidiously, and when the inflammation does not involve the capsule of the liver, the symptoms are in most cases few and obscure, until the fibrine effused in the substance of the liver has caused impediment to the flow of the portal blood, and to the secretion and escape of bile. Some enlargement of the liver, a dull pain in the right hypochondrium, and disordered digestion, are the chief symptoms in the early stages, and some of these even may be wanting, or be so slight as to escape our notice.

"In some cases however, the onset of the disease is more sudden, and the symptoms at first are more striking and more indicative of active inflammation. The patient has fever, with loss of appetite, perhaps occasional vomiting, and, it may be, jaundice, and his urine is high-colored and charged with lithates. There is much pain and tenderness in the region of the liver, and the liver is readily felt to be enlarged.

"The disease begins in this way when the lymph is effused at once, and the inflammation involves the capsule of the liver.

"When the acute symptoms are subdued by treatment, or subside of themselves, the patient follows his usual occupations, and presents only the slight tokens of disease before mentioned. But he finds that he gradually grows weaker and thinner, his appetite is uncertain, his skin becomes dry and rough, and his complexion sallow and earthy.

"After the lapse of some weeks, or months, or years,—according to the quantity of lymph first effused, the success of the treatment then adopted, and the subsequent habits of the patient—the fibrine poured out has become so contracted, and is in such quantity, that the free passage of the blood through

the liver, and perhaps also the free escape of bile from it, is prevented. There then occur a different train of symptoms, which are so characteristic, that there is little difficulty in detecting the disease.

"The belly becomes enlarged from effusion of serous fluid into the cavity of the peritoneum, which takes place without pain or tenderness, and gradually increases so as to cause great distension of the belly, and often, by impeding the movements of the diaphragm, much difficulty of breathing. In some cases this dropsy of the belly is followed by œdema of the legs, but there is no œdema of the hands or face, unless there be likewise disease of the heart or kidneys.

"The patient is liable to hemorrhage from the bowels, and to piles, and the veins on the surface of the belly are enlarged. This enlargement of the cutaneous veins shows clearly that the current of the portal blood is impeded, and is very characteristic of the disease we are considering.

"The complexion is sallow and earthy, or of a slightly greenish cast, and the skin is almost invariably dry and rough."

"It will readily be seen, that most of the symptoms of the advanced stage of cirrhosis result from obliteration or compression of the small twigs of the portal vein, and the consequent obstacle to the circulation through the liver. The blood in the portal vein cannot pass through the liver with its usual freedom, the veins that go to form the portal vein become, in consequence, distended, and various effects follow."

One of the diseases most commonly produced by cirrhosis of the liver is *ascites*. In consequence of the obstruction to the passage of blood from the portal veins, the serum transudes through the coats of the vessels, filling the abdominal cavity and producing all the distressing symptoms consequent upon dropsical effusion into the peritoneal cavity.

Another effect of this condition of the liver, is a congested condition of the vessels of the intestines, giving rise to piles and not unfrequently to discharge of blood from the stomach or bowels.

The blood impeded in its passage through the liver, finds its way to the heart, through the cutaneous veins which are in consequence distended.

"*Treatment*.—From what has been already said of the nature of cirrhosis, it is quite clear, that it is only in the early stage of the disease that we can materially benefit the patient. During this stage, while the inflammation is active, it may perhaps be in our power to lessen the amount of effusion, and before the lymph effused has become organized, even to cause

its removal by absorption. But when fibrine has been thrown out in large quantity, and when it has become organized, or is otherwise incapable of removal, and has already by its contraction caused much impediment to the flow of portal blood, and materially impeded the due secretion of bile, medical treatment can be only palliative. It is, therefore, of the utmost importance that the disease be detected early, in order that we may be able to obviate such grave and irremediable effects. But, as we have seen, this is not without difficulty, as the symptoms are then often few and very obscure, and it is only by considering the previous habits of the patient, that we see in them the early tokens of organic disease. In the person of a spirit-drinker, we should never neglect pain and tenderness in the region of the liver, especially if associated with some degree of fever.

"At the commencement of the disease, the best treatment is, cupping over the liver, with saline medicines and low diet. While there is much tenderness, and the patient is feverish, nothing produces so much relief as cupping. We must bear in mind, however, that hard drinkers bear bleeding ill, and be careful not to push this remedy too far. Delirium tremens, or other alarming disorder, may be the consequence of its rash and inordinate employment. When bleeding is not considered safe, much benefit may be derived from the application of a blister.

"When the fever has abated, and the liver is still large, mercury and iodide of potassium are the medicines from which most benefit may be expected. Blue pill may be given in moderate doses, so as slightly to affect the mouth; or iodide of potassium may be given internally, and, at the same time, the iodine ointment be rubbed into the side."

Inflammation of the veins of the liver, like phlebitis in other parts, may be suppurative, that is, it may lead to the formation of abscess, or it may be adhesive and lead only to the effusion of coagulable lymph which blocks up and obliterates the vein.

Inflammation of the trunk of the vena portæ is not common for the reason that it is deep seated, and consequently less liable to wounds and other injuries. Cases are related, however, in which inflammation and abscess of the liver were consequent upon suppurative inflammation of this vein.

"Pus-globules brought to the liver by the portal vein, usually become all arrested there, and do not pass through, as they often do through the lungs, to cause scattered abscesses in other organs. It is for this reason that suppurative inflamma-

tion of a vein that feeds the vena portæ, kills less quickly than suppurative inflammation of a vein that returns its blood immediately to the lungs. The blood is filtered, as it were, of pus, in passing through the liver, and the local disease is confined to that one organ."

"Mere adhesive inflammation of branches of the portal vein, does not prove fatal, like suppurative inflammation; and on this account, and from the difficulty of distinguishing the different inflammatory diseases of the liver during life, we cannot yet give its clinical history. The patient recovers, and when he dies, perhaps some years after, of another disease, we see merely the ultimate changes to which obliteration of branches of the portal vein leads. These changes are very striking and characteristic. The surface of the liver is marked by deep linear fissures, corresponding to the obliterated branches of the vein, and caused by atrophy of those portions of the liver which the obliterated branches supplied."

The subject next treated of, is inflammation of the gall-bladder and ducts.

"Inflammation of the gall-bladder and ducts probably arises from various causes, each of which determines in great measure the character and the course of the inflammation, and its mode of termination—so that we cannot expect a satisfactory account of the different kinds of inflammation until we can arrange them according to the causes by which they are respectively produced."

"The different forms of inflammation of a mucous membrane, considered with reference to their effects, are

"1st. What may be called *catarrhal* inflammation, which merely increases the quantity and changes the quality of the natural *mucus*, often rendering it viscid, whitish, and opaque."

"2d. *Suppurative* inflammation, where the matter secreted is purulent.

"3d. *Croupal* or *plastic* inflammation, where the matter effused forms a solid albuminous layer on the diseased surface, of which, when this is a tube, it becomes a perfect *cast*.

"4th. *Ulcerative* inflammation—if, indeed, the process which leads to ulceration can with propriety be classed with those leading to the results before mentioned, and be comprehended with them under the generic term, *inflammation*."

"Catarrhal inflammation of the ducts is, probably, not uncommon. It is not a fatal disease, and, like catarrhal inflammation of other mucous membranes, may cause no permanent changes; so that it may often have occurred, where no traces of it are found. It happens, however, not very unfrequently, that on squeezing the hepatic ducts, a viscid whitish fluid oozes out, which, on examination through the microscope, is

seen to be chiefly made up of the prismatic epithelial cells of the gall-ducts. The symptoms we should expect in catarrhal inflammation of the hepatic ducts, are some degree of feverishness, with slight pain in the region of the liver, and if many of the ducts become closed by thickening of their coats, or be choked by the viscid secretion, slight enlargement of the liver, and jaundice.

"Many of the cases of simple jaundice coming on in healthy persons, and attended with very little pain and fever, are probably cases of this kind.

"In a severer form of inflammation, the matter secreted is purulent, but it has seldom the visible characters of pure pus. The pus is mixed with opaque mucus secreted at the same time, and, it may be, with bile also. If the bile be in considerable quantity, and ammoniacal, its alkali renders the pus glairy, and the result is a viscid, greenish, or yellowish fluid, very different in appearance from pure pus."

"Suppurative inflammation of the gall-bladder seems especially liable to occur when, by any cause, the cystic duct is permanently closed.

"Cruveilhier (liv. xxiii. pl. 5) has given a plate of a liver studded with cancerous tumours, in which the cystic duct was obliterated, and the gall-bladder inflamed and full of pus. No notes of the case are given.

"A similar instance is recorded by Andral, (Clin. Med. iv. 518,) in the case of a woman who died at the age of 47. There were numerous cancerous tumours in the liver. The gall-bladder was full of pus, and its mucous membrane inflamed. The cystic duct seems to have been closed. The hepatic duct was very large and full of bile. The common duct exhibited nothing unusual. There was recently effused lymph on the surface of the peritoneum, and the mucous membrane in the large end of the stomach was softened. No other marks of disease are noticed.

"Inflammation of the gall-bladder, whether catarrhal or suppurative, seldom, perhaps, proves fatal of itself, except when the cystic duct is closed, and the gall-bladder converted into an abscess. When it is the sole disease, and the ducts are open, so that the matter can escape, the patient may, perhaps, recover perfectly, or may survive with the gall-bladder more or less changed in structure. I have twice found the gall-bladder and cystic duct contracted, and their coats thickened, in young persons who died of other diseases, and in whom there were no gall-stones, nor any trace of inflammation of the common or hepatic ducts, or of the capsule or substance of the liver."

"*Croupal* or *plastic* inflammation of the mucous membrane of the gall-bladder and ducts is very rare. Rokitsansky says he has observed it in the ducts within the liver, in what has



been called the secondary fever of cholera, and as a sequel of ordinary typhoid fever. It produces within the gall-ducts membranous tubes, in which the bile forms tree-like concretions; and this again, by blocking up the passage, causes distension of the capillary ducts behind."

"*Ulceration* of the gall-bladder is much more common than the forms of inflammation yet considered, and occurs in various circumstances."

"Sir G. Blane, in his account of the Walcheren fever, states that the mucous membrane of the gall bladder was frequently found inflamed and ulcerated; the ulcers having in some cases the conical or tubercular form sometimes seen in dysentery. The gall bladder was generally distended with bile, which, in those persons who died early, was of a deep green or dark brown, but in more protracted cases had the consistence and colour of tar. This tar-like fluid did not taste bitter like bile, and when mixed with water did not impart any yellowness to it, while it was often so acrid as to excoriate the lip."

"The acrid quality of the bile in the Walcheren fever, and the circumstance that in Dr. Boyle's dissections, the strongest marks of inflammation in the intestinal canal were about the entrance of the common duct into the duodenum, render it probable that the inflammation of the gall-bladder and duodenum, in remittent fever, is caused by irritating bile. As in typhoid fever, the symptoms of inflammation of the gall-bladder are not distinguishable in the midst of the general disorder that constitutes the fever, and the symptoms of inflammation of other parts that likewise occur in its course.

"In this country, ulceration of the gall-bladder is produced perhaps not unfrequently by the irritation of gall-stones.

"Ulceration of the gall-bladder and gall stones are often found together, but we must not infer in all such cases, that the ulcers were produced by the gall-stones. Both the ulcers and the gall-stones may have resulted from the presence of bile of unnatural quality.

"When there is only one ulcer in the bladder, and a large or hard gall-stone is found resting upon it, we may perhaps safely infer that the mechanical irritation of the gall-stone was the cause of the ulcer. Gall-stones too large to pass through the cystic duct, not unfrequently cause ulceration of the lower or depending part of the gall-bladder; lymph is poured out on the peritoneal coat below the ulcer; the gall-bladder becomes united by this means to the duodenum or colon; the ulcer eats likewise through the coats of the intestine, at this point; and the gall-stone escapes into the intestinal canal. The processes of ulceration and adhesion take place very slowly,—and are seldom attended by alarming symptoms. Often, indeed, the first clear intimation that such an event

has happened, is the discharge of a large gall-stone from the bowels.

"In other cases, we find many small round ulcers in the gall-bladder, and perhaps in the common duct, and small gall-stones in the bladder not resting on the ulcers. When it is considered that most human gall-stones are so light as to float in bile—since they almost float in water, which is of much lower specific gravity—and that, consequently, they can exert no pressure on the coats of the gall-bladder from their *weight*, when there is bile enough in the bladder to keep them afloat;—it seems most reasonable to refer both ulcers and gall-stones in these to an unhealthy state of the bile."

"Ulceration of the gall-bladder and ducts may lead to various results.

"1st. An ulcer, commencing in the mucous membrane of the gall-bladder or of the common duct, may eat through its different coats until the peritoneal coat is laid bare. The bile, brought in contact with this coat, causes it to slough, and the contents of the gall-bladder are poured suddenly into the cavity of the peritoneum. When this happens, diffuse suppurative inflammation of the peritoneum is set up, which destroys life in a few hours—quicker, perhaps, in most cases, than the peritonitis that follows rupture of the bowels."

"2d. When an ulcer of the bladder or ducts is caused by a gall-stone, adhesive inflammation of the serous membrane is usually set up before perforation takes place; the gall-bladder or duct becomes united to some adjacent part, generally the duodenum or colon; the coats of the intestine are eaten through after those of the gall-bladder or duct; and the gall-stone passes into the intestinal canal."

"3d. Ulceration of the gall-bladder or ducts, like ulceration of other mucous surfaces that return their blood to the portal vein, may lead to scattered abscesses in the substance of the liver."

"The abscesses are probably the immediate consequence of suppurative inflammation of a small vein in the vicinity of the ulcer, or of the absorption of the ichorous matter of the ulcer."

"Closure of the *cystic* duct destroys the office of the gall-bladder, and leads to various changes in it, which depend chiefly on the length of time the duct has been closed, and on the previous condition of the gall-bladder.

"When the cystic duct is closed by adhesive inflammation of the capsule of the liver, and the coats of the gall-bladder were previously healthy, the bile in the gall-bladder is absorbed, and its place is soon occupied by a glairy fluid, of the consistence of mucus or synovia, and not at all tinged, or but very slightly tinged with bile. After a time, this fluid is se-

creted in less abundance, and the gall-bladder contracts and shrivels; in some cases, almost to the size of an almond."

"The effects of closure of the cystic duct on digestion and the general health, are much less serious than might have been expected, and sometimes are of very little import."

"Closure of the *common* duct has far more serious effects.

"The most immediate of these, are deep jaundice, dilatation of the gall-bladder and hepatic ducts, and retention of bile in the lobular substance of the liver, which acquires in consequence a deep olive colour. By the retention of bile, the liver at first grows larger, but its increase of size from this cause is, perhaps, never very great. Subsequently, from atrophy of the lobular substance, it shrinks again, and, in the end, notwithstanding the dilatation of the gall-ducts, becomes much smaller than in health.

"If the closure of the common duct occur suddenly, the gall-bladder, or one of the ducts behind the obstruction, may be distended so rapidly as to burst. Several cases of this kind are recorded."

"The ultimate effect of closure of the common duct on the *lobular substance* of the liver, is very remarkable. The cells which go to form this substance, and which secrete the bile, are destroyed; the capillary vessels of the lobules, which minister to secretion, their office gone, waste; the liver shrinks and no longer presents an appearance of lobules, and its office is no longer in any degree performed."

"In the *treatment* of inflammation of the gall-bladder and ducts, a most important principle is the early employment of local depletion. Leeches, as was seen distinctly enough in some of the cases that have been related, relieve the pain and tenderness, and no doubt mitigate the inflammation, and, in consequence, lessen the danger of perforation and of permanent closure of the ducts."

"Blisters have the same kind of efficacy as leeches. Like these, they often relieve the pain and tenderness in a striking manner, and therefore, we may infer, tend also to prevent permanent changes of structure. The proper time for blistering is when the pain and fever have abated under leeches and other measures, and it is no longer deemed advisable to take away blood.

"Another important principle in the treatment of these cases, is the strict enforcement of a plain and appropriate diet. As a particular point in the diet to be observed, the free use of diluents may have some advantages. While, by filling the stomach, they help to empty the gall-bladder by their pressure, it is also probable that, after absorption, they pass out of the circulation again, in part by the liver, and thus dilute the bile.

"In certain cases of the class now under consideration, the

judicious use of mercury is attended with signal good effects. It probably acts beneficially in two ways:—1st, by increasing the quantity and by promoting the flow of bile; and, 2d, by producing changes in its quality which render it less irritating. These are the objects that determine the principles of its administration in these cases, in which the desired effect is best obtained, not by the more powerful and constitutional action of the drug,—which should be studiously avoided,—but by the occasional administration of its milder preparations, repeated as need may be. It is to the striking benefit sometimes derived from mercury used in this way, that this medicine owes the reputation it has long had as a remedy in liver diseases.

“Soda is another medicine much in use in the treatment of these cases, and there is reason to believe that it deserves the esteem in which it is generally held. Physiological considerations would lead us to suppose that it is best suited to cases of catarrhal inflammation of the ducts. As soda is a natural constituent of bile, and is therefore,—we may infer,—readily excreted by the liver, it probably renders the secretion from the ducts less viscid, and has the same sort of efficacy in these cases as in catarrhal diseases of the lungs, in which this and other alkalies have been long used as expectorants.”

“Having considered the inflammatory diseases of the liver,” the author next passes to the consideration of “diseases, in which, seemingly without inflammation, the secreting power or the nutrition of the hepatic cells and other tissues of the liver, is seriously disordered.

“These diseases may be divided into two principal groups. One of these groups is characterised by suspension of the secretion of bile. The principal feature of the other is, that the hepatic cells separate from the blood, some abnormal matter, which, instead of passing freely out of the liver in the bile, is retained there, adding to the size of the liver, and more or less changing its appearance and texture.”

“The most remarkable and most serious change is, where the cells are completely broken down and destroyed. It has been seen that this may result from long retention of the secreted bile from closure of the common duct. In consequence of this the hepatic gall-ducts become enormously dilated, and the whole liver acquires a deep olive colour. Its tissue is flabby, but not readily broken down by the finger, and *presents no appearance of lobules*. Every part of the liver is affected alike, and exhibits under the microscope nothing but free oil-globules and irregular particles of solid biliary matter. The

liver contains but little blood, and partly from this, but chiefly from loss of the cells, it may be smaller than in health, and its surface wrinkled, notwithstanding the biliary matter accumulated in it.

"But destruction of the hepatic cells may take place rapidly without any obstruction of the gall-ducts and instead of being consequent on jaundice, may be the cause of jaundice that proves rapidly fatal, apparently from disorder of the functions of the brain.

"It has been long known that cases of jaundice now and then occur which prove fatal in this way; and that in such cases it frequently happens that no obstruction can be found in the gall-ducts,—which are pale and empty of bile,—and no effusions characteristic of inflammation in any part of the liver. In some such cases, no change of structure has been remarked in the liver, and the disease has been described as fatal jaundice from suppressed secretion. In other cases, the liver has been found unusually small, and much softened, and changed in colour, and the disease has been spoken of as *softening* of the liver, or *simple softening* or *black softening*, according to the colour of the liver in the individual case."

"It would seem that this suspension of the secreting process and disorganization of the liver, may result from powerful and depressing emotions; but that it is far more frequently produced by some poison, introduced from without, or generated in the body by faulty assimilation or digestion. It appears, too, that various poisons,—pus, the poison of serpents, perhaps the poison of some forms of fever, and various others,—may alike stop the secretion of the liver, and lead to the same kind of disorganization of its structure, while their other effects on the system are very different."

It has already been stated, that the size, color and firmness of the liver may be changed without the intervention of inflammation, and without any destruction of its cells, simply from matter being secreted in undue quantity, which, instead of passing off freely in the bile, is retained in the substance of the organ.

The most common disease of this class is fatty liver, or fatty degeneration of the liver.

In every human liver, there are always deposited in the secreting cells, small quantities of oil or fat.

"In the fatty liver, the quantity of oil so placed is enormously increased. The hepatic cells are gorged with large globules, which greatly distend them, and often obscure their nuclei."

"A liver that has undergone the fatty degeneration, may be little altered in shape, but it is larger, and paler, and softer, and more greasy than natural. These changes in its sensible qualities depend chiefly, if not solely, on the interstitial deposit of the oil-globules, and their degree may give us some estimate of the quantity of oil the liver contains. When this is very large, the liver is large in proportion, sometimes twice its natural size, and is generally somewhat altered in shape, being thicker than natural, and having its edges blunter or more rounded. The capsule of the liver is stretched and smooth, and when divided its edges recede. The tissue of the liver is pale, and, generally, throughout of a soft buff colour, dotted with brown or red. The brown or red dots mark the centres of the lobules, which are unusually large and distinct, and are buff-coloured near their margins. The liver is very soft, and greases the hands, or the scalpel, like common fat.

"When the quantity of oil is less, the liver is not so large, nor so pale, nor so soft,—but presents an appearance described as the nutmeg-liver. The liver may not feel greasy, but an unusual quantity of fat may be at once detected by placing a thin slice of the liver on a piece of paper, and exposing it to the action of heat. Some of the oil or fat exudes, and greases the paper. The best way, however, of ascertaining the quantity of fat—at least that which exists in the form of oil-globules—is by examining a small particle of the liver through the microscope. The oil-globules are objects of sight, and from their form and their dark outline, are at once distinguished."

"An accumulation of fat in the hepatic cells, notwithstanding it so changes the appearance and other sensible qualities of the liver, seems not to interfere much with its office. There is no jaundice; no congestion of the veins that feed the vena portæ,—no obstruction, therefore, to the circulation through the liver; no pain, or even tenderness. The only inconvenience the patient suffers from this condition of the liver, is that which arises from the bulk of the organ,—distension of the belly, and a sense of fullness and weight, on turning in bed from the right side to the left. The reason of their being no jaundice is, that the colouring matter of the bile is secreted, and passes off, as usual. The absence of other symptoms seems to depend on the softness of the oil-globules, and the readiness with which they change their form and yield to pressure; on their being deposited gradually and evenly, so as not to cause sudden stretching of the capsule of the liver; and on their having no tendency to excite inflammation of the capsule, or of the veins.

"The liver becomes fatty in very different states of the body.

"1st.—It is often fatty in persons who lead indolent lives,



and are at the same time gross feeders—eating largely of fatty substances, and drinking freely of spirits, but more especially of porter and other heavy malt liquors; and is then generally associated with excess of fat under the skin, and in other parts of the body in which fat is usually deposited.”

“2d.—But the liver is often found fatty in persons dead of phthisis, who, instead of being loaded with fat, are generally much wasted.

“The frequency with which the liver undergoes this change in phthisis, was, I believe, first pointed out by M. Louis, in his celebrated work on phthisis, published in 1825. M. Louis detected the fatty degeneration by the altered look and feel of the liver, in forty cases of phthisis, out of 120,—or, in one-third of the subjects he examined.”

“Fatty degeneration of the liver in such degree as to be at once recognised, is not only frequent in phthisis, but,—setting aside the persons in whom the liver is loaded with fat in common with the areolar tissue and other parts of the body in which fat is liable to be deposited,—is almost peculiar to this disease. Frequently, indeed, in subjects dead of various diseases, an unusual quantity of fat is found in the liver, which is at once discovered by the microscope, and which may be detected by a practised eye, by merely looking at the liver,—but the fatty degeneration is seldom so advanced as to be readily recognised at sight, except in persons dead of phthisis. M. Louis states, that in the course of three years he met with forty-nine instances of fatty liver, and in forty-seven of these, the patients were phthisical.

“In speculating on the cause of this peculiar tendency to accumulation of fat in the liver, in phthisis, it is important to remark, that it does not depend on tuberculous disease of the liver itself. M. Louis states, that there were no tubercles in the liver in any of the cases in which he found it fatty: and that in two cases in which there were tubercles in the liver, the liver was not fatty.”

“It has been imagined, that fatty matter accumulates in the liver in phthisis, in consequence merely of the office of the lungs being greatly and gradually interfered with—that hydro-carbonaceous matters, passing off in less quantity than natural through the lungs, are, in consequence, eliminated in larger quantity by the liver. This opinion is rendered very improbable by the circumstance, that in organic diseases of the heart, and in asthma, where the office of the lungs is not unfrequently as much interfered with as in phthisis, the liver does not become fatty. Still stronger refutation of it is afforded by the fact, noticed by Rokitsky, that fatty degeneration of the liver is found in conjunction with tuberculous disease of other organs—the mesentery, the serous membranes, the bones—when there are no tubercles in the lungs.

"These facts show that we must seek the explanation of the fatty degeneration of the liver in phthisis, in some other conditions than mere diminished function of the lungs."

"The opinion was some years ago advanced by the late Baron Larrey, that the fatty condition of the liver in these cases results from solution of the fat previously laid up in the body. He considered this opinion strongly supported by the method then employed in France to make the livers of geese fatty, and of which he gives the following account: 'To procure the large livers of geese, for the making of patties, fattened birds are confined in close cages, and then exposed to a graduated heat, being kept at the same time entirely without food, even without water. They become feverish, the fat undergoes a kind of fusion, and the liver grows enormously large. The liver is considered to be in the desired state, when the animal is *extremely wasted*, and the fever increases.'

"It is quite clear, that, in this process, the fat which accumulates in the liver, is derived from that previously laid up in the body. It is extremely probable, that the same thing happens in phthisis, and in the other wasting diseases in which fatty degeneration of the liver occurs, in man: that in the process of wasting, the fat stored up in the body is largely taken up by the veins, so that it comes to be in excess in the blood, and is then laid hold of by the hepatic cells, which have a natural affinity for it."

"Our knowledge of the frequency of fatty degeneration of the liver in phthisis enables us often to discover it during the life of the patient. In a woman labouring under phthisis, considerable enlargement of the liver, without jaundice, or ascites, or much pain or tenderness, is evidence enough, especially when the woman has been of temperate habits, that the liver is fatty. But as this condition of the liver causes but little inconvenience in itself, and does not lead to inflammation, or to other secondary mischief, and as the disease with which it is associated is inevitably fatal, it is not an object of treatment."

"When the liver becomes fatty from gross feeding and indolent habits, the excess of fat will, doubtless, disappear from it, as from other parts, on the person adopting an opposite mode of life. If he will rise early, take active exercise, live chiefly on lean meat, with plenty of salt, and drink water—and will abstain from butter, bacon, oil, beer and other fermented drinks, and eat sparingly of sugar and potatoes—he will not only get rid of his fat, but his muscles will be better nourished, and his strength be increased."

A condition analogous to fatty liver, is sometimes met with in persons wasted by scrofulous disease, called by writers scrofulous enlargement of the liver.

"Scrofulous enlargement of the liver, like the enlargement from deposit of fat, comes on without pain of the liver, or even tenderness; a circumstance sufficiently accounted for by the gradual and even manner in which the foreign matter accumulates, and from its having no tendency to cause inflammation of the capsule of the liver, or of the veins."

"In this disease, as in the fatty liver, the secretion of bile—or, at least, of the colouring matters of bile—may go on as usual, and the complexion remain quite clear. But this is, perhaps, not so generally the case as in the fatty liver. The matter deposited in the substance of the liver being firmer, is, probably, more apt to interrupt the secretion, or the flow of the bile, and to render the complexion sallow. Dr. Graves has remarked that in persons with scrofulous enlargement of the liver, the stools are variously coloured with bile—"one part of them will be bilious, another part of them clay-coloured; they will be yellow to-day, and pale to-morrow," (Clinical Medicine, p. 566.) He infers from this, that the office of the liver is performed intermittingly; that the liver secretes bile during a certain period of the digestive process, then stops, and then secretes again."

"The *treatment*, in these cases, should have chief reference to the state of the system—the peculiar cachexy—on which the faulty secretion and large size of the liver depend.

"When the enlargement of the liver is consequent on scrofula, our chief reliance must be on warm clothing, sea-air and bathing, a light nourishing diet, comprising a liberal allowance of animal food and wine, and the preparations of iodine and iron, separate or combined.

"When the health has been broken by the combined effects of syphilis and mercury, warm clothing, a tonic regimen, iodide of potassium, nitric acid, sarsaparilla, and guaiacum, are the appropriate remedies.

"In either case, the original malady is faulty assimilation, and, if we can remedy this, we shall probably, in most cases, if not in all, remedy the unnatural condition of the liver, and other secondary ailments.

My own experience leads me to think highly of frictions with iodine ointment, long-continued, in such cases. I have several times seen an enlarged liver reduced to its natural volume by iodide of potassium and frictions with iodine, or, simply by these frictions and saline purgatives. The matter deposited in the liver does not become organized like the fibrine poured out in inflammation, and, if the general health mends, it may, in time, pass off in the bile, or be removed by absorption."

The next subjects investigated are diseases of the liver, such as, excessive and defective secretion of bile, morbid bile,

gall stones, cancer of the liver, hydatid tumors, &c.; but as these are diseases less frequent and of less importance than those previously treated of; and as we have already extended our quotations farther than we had intended; we will close with the remark, that in our opinion, this work, from Dr. Budd, is one of the best selections for the library of a western physician.

W. B. H.

## PART III.—BIBLIOGRAPHICAL NOTICES.

## ARTICLE VI.

*A Manual of the Diseases of the Eye, or a Treatise on Ophthalmology.* By S. LITTELL, JR., M. D., one of the Surgeons of the Wills Hospital, Fellow of the College of Physicians of Philadelphia, etc. etc. Second edition revised and enlarged. Philadelphia: Hogan & Thompson. 1846. pp. 372. 12 mo.

Dr. Littell has, in the clearest manner, condensed in this small volume, all that is of practical value in relation to the diseases of the eye, without forfeiting its name to the title of a Manual. We can with much satisfaction commend this treatise to the favorable notice of the profession. The physician will find it eminently valuable as a book of reference, and, from the clearness of its style, it will be equally valuable to the student.

The Institution to which Dr. Littell is attached as surgeon is exclusively for the blind and lame, and this, as well as an extensive private practice in diseases of the eye, renders him entirely qualified to write on this subject.

The first edition was noticed with commendation by a British Journal of high standing, and the work was republished in London. There is a copious glossary compiled by the author and his English editor: H. S. H.

## ARTICLE VII.

*Elements of Materia Medica and Therapeutics.* By EDWARD BALLARD, M. D., London, Physician to St. Pancras Royal General Dispensary, and Medical Tutor in University College, London, and ALFRED BARING GARROD, M.D., London, Physician to the Fore Street Dispensary, and Lecturer on Materia Medica and Therapeutics in the Aldersgate School of Medicine: with additions and alterations by R. EGLESFIELD GRIFFITH, M. D. Philadelphia: Hogan & Thompson. 1846. 8 vo. pp. 516.

In this work the authors have divested their text of every thing but that which is absolutely essential.

The classification is a natural historical one, the theories of the chemical process are illustrated by diagrams.

The editor has added the more valuable indigenous plants used in Medicine, and has adapted the whole to the United States Pharmacopœia. The arrangement which has been

adopted in the description of the individual articles is systematically adhered to throughout, and the whole is written in a clear and concise manner. With the additions and emendations of the editor, it is valuable, especially as a text book for American Students.

H. S. H.

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ARTICLE VIII.

*The Influence of Tropical Climates on European Constitutions.*

By JAMES JOHNSON, M.D., Physician to the late King, etc. and JAMES RANALD MARTIN, Esq., late Presidency Surgeon, and Surgeon to the Native Hospital, Calcutta. From the sixth London edition, with notes by an American Physician. New York: Samuel S. & William Wood, 261 Pearl Street. 1846. Svo. pp. 624. (From the Publishers.)

*Five Dissertations on Fever.* By GEORGE FORDYCE, M. D., F. R. S., Fellow of the Royal College of Physicians, Senior Physician to St. Thomas' Hospital, and Reader on the Practice of Physic in London. Second American edition, with an introduction. Philadelphia: Ed. Barrington & Geo. D. Haskell. 1846. Svo. pp. 403. (From the Publishers.)

To the merits of the former of these works it is almost unnecessary to refer, having been so long and so favorably known to the profession, as to have become part of our Classic Medical Literature; and the publishers are entitled to thanks for increasing our facilities for obtaining it. In regard to Dr. Johnson as an author, the writer of his obituary in the *Medico-Chirurgical Review*, says, "he was remarkable for a facility of composition, a felicitous, though not always a correct style, and an original vigor and raciness of observation and expression, that redeem some faults, and make his works eminently readable. He may be almost called the Cobbett of Medical Literature, the same boldness, terseness, and straight-forwardness being characteristic of the writings of both."

It is this vigor of expression, the terseness and straight-forwardness, which, added to their intrinsic value have given his writings so widely spread a popularity.

Dr. Fordyce, although not an elegant writer, expresses his thoughts clearly and forcibly.

It will be found replete with information of the most practical character, and his treatment is detailed with a profitable minuteness, the author never generalizing on this point. It also has the great merit of being the production of one whom, in addition to his vast learning, was not biased by theories but



drew his descriptions from nature, without disguising her to suit a favorite theory. The Editor, Dr. John Bell of Philadelphia, (this being the April No. of the Select Medical Library,) has added an introduction and divided the dissertations into chapters, preceded by copious contents, which, with his index, has materially increased its convenience as a book of reference.

H. S. H.

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ARTICLE IX.

*A Manual of Chemistry.* By RICHARD D. HOBLIN, A. M., OXON., author of a "Dictionary of terms used in Medicine and the collateral sciences." New York: Samuel S. and William Wood, 126 Pearl street. 1846. pp. 335. (From the Publishers.)

The manual before us, is, in our opinion, one of the best yet published for the use of students just beginning the study of Chemistry.

It seems to have been the object of the author, to state all the most important facts and theories of the science, in as clear a light and in as condensed a form as possible, and, as he remarks, "to make the student acquainted with the facts which Chemistry is daily presenting to our notice; to enable him from the consideration of these facts, to contemplate the laws which regulate the economy of nature; to stimulate him to pursue the science even into its farthest recesses."

We cordially recommend the book, as well adapted to the wants of students, beginning the study of this important science. Teachers in schools and academies, will find it a most valuable text book.

W. B. H.

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ARTICLE X.

*Clinical Lectures on Surgery.* Delivered at St. George's Hospital, by SIR BENJAMIN BRODIE, Bart., V. P. R. S., Sergeant Surgeon to the Queen, &c. &c. Philadelphia: Lea & Blanchard. 1846. pp. 352. (From the publishers.)

Brodie's lectures have been in the course of publication, during the past year, in the "Medical News," and have thus been extensively circulated, and are now issued in a complete state. We have already, from time to time, laid before our readers extracts from them, and may have occasion to do so hereafter. The author ranks, beyond all dispute, among the first writers

at present living, and this work is full of practical instruction. No surgeon should be without it. The following observations will not be without interest to our readers:

“When you suspect that pressure on any part is so great as to be likely to occasion mortification, you can do nothing but remove the pressure. When a bandage is placed in a case of fracture, you must remove it as soon as you suspect that the swelling of the parts has made it very tight, lest mortification should follow. When a patient has been so long confined to his bed, that you expect mortification will take place, you must endeavour to guard against it. It is more easy to prevent it than to stop it when it has once begun. How, then, is this to be accomplished? If a patient lies on his back, the skin sloughs over the os sacrum; if on one side then it sloughs over the great trochanter. Endeavour, when you can manage it, to make a patient vary his posture. If he can be shifted, let him lie at one time on his back; at another on his side: nay, let him turn round, and lie occasionally on his face. If you have what they call a prone couch, properly constructed for the purpose, he may, in many instances, use it to great advantage. In one of the worst cases of this kind, when mortification had begun, I used to turn the patient on his face many hours in the day, and with perfect success. But sometimes the patient cannot be shifted. There may be fracture of the thigh, and he must lie always on his back. You must then endeavour to take off the pressure by other means—by an air cushion with a hole in the centre, the tender part over the os sacrum being in the hole of the cushion. But in all cases where you use an expedient of this kind, you should first apply a piece of common soap plaster, spread on calico, over the part, to support it. If you merely place the hole of the cushion under the os sacrum, the skin will bulge into the hole, and the patient will lie as bad as if there were no hole at all, or even worse. The same rule applies to all cases where you use contrivances to take off pressure, as in those of corns and bunions. In cases where you can have resource to it, the water-bed is very useful in preventing mortification from pressure. Dr. Arnott’s hydrostatic or water-bed diffuses the pressure everywhere. When you lie on a mattress, the pressure is thrown on all the prominent parts of the body, and little elsewhere; but in using the water-bed the water rises to fill up the hollow places, and the pressure is not greater on the sacrum than on other parts. No doubt this bed is the best method which has yet been contrived for preventing mortification from pressure—the only objection to it is, that it is not applicable to all cases. In cases of compound fracture of the thigh or leg, for example, it would not give sufficient steadiness to the injured limb.

"But another plan may be adopted to prevent mortification from pressure—that is, to prevent the inflammation which precedes it. The thicker the cuticle the more it will protect the parts beneath it. You may, if you attend to it in time, add to the thickness of the cuticle by stimulating the surface of the skin. Nurses know this very well, for when patients are bed-ridden, they wash the parts subjected to pressure with brandy. What is better, is a lotion composed of two grains of oxymuriate of mercury to an ounce of proof spirits. When you think that a patient is likely to be confined so long in bed that there may be mortification from pressure, wash the parts two or three times a day with this lotion. I have found it useful in other cases where a patient suffers from pressure. A man has a rupture which requires to be supported by a very powerful truss. It galls and frets the skin, and may at last cause inflammation and sloughing; but under the use of the lotion, a thicker cuticle is generated and this mischief is avoided."—p. 63.

"It has been a sort of *dictum* of the schools of surgery, that you should not amputate while mortification is going on; and certainly, when there is mortification from ossified arteries (as I shall hereafter explain,) or when there is mortification from inflammation, you ought to wait for the mortification being stopped, and for the formation of a distinct line of separation, before you proceed to an operation. But it must have been palpable to every body who took the pains to consider the subject, that this rule would not apply to all cases of mortification. For example, a man has a strangulated hernia; when you open the sac you find the omentum strangulated, a part of it dead, and the mortification still extending. You would not hesitate in a case like this to cut off the dead and dying omentum. If piles were undergoing the process of mortification from being strangulated by the sphincter muscle, you would not hesitate to cut them off. You may conceive many other cases, in which the cause of mortification is local, and to which the general rule which I have just mentioned does not apply. Baron Larrey has the credit of having pointed out more distinctly than had been done before, that where there is mortification from local injury, you may venture to amputate, though the mortification is still spreading. But I apprehend that the operation must be had recourse to at once, and that the case admits of no delay. If, in consequence of local injury to a limb, mortification has begun, but has not yet produced any severe shock on the system, there you may amputate. But where the mortification has been going on for some days, so that the system has begun to be influenced by it, the pulse getting weak, perhaps intermitting, and with great prostration of strength, in such a case you must not venture to amputate. Under such circumstances it is probable that the

system is not in a state to bear the additional shock of the operation. However, I believe that cases enough may be adduced to prove that Baron Larrey's rule of not waiting to amputate till the mortification has stopped, is applicable in a great number of instances where the disease arises from local injury. It is good in theory, and there is now sufficient experience to enable us to say that it is good in practice also." —p. 66.

## ARTICLE XI.

*The Practice of Surgery.* By JAMES MILLER, F. R. S. E., Professor of Surgery in the University of Edinburgh, etc., etc. Philadelphia: Lea & Blanchard. 1846. pp. 496. (From the Publishers.)

This work is a sequel to the Principles of Surgery, of which we had occasion, some months since, to express a favorable opinion in this Journal.

Taken together they form a very condensed and complete system of Surgery not surpassed as a text book by any work with which we are acquainted, and well adapted for a book of reference for practitioners.

We subjoin the following which will exhibit the practice of Professor Miller in a case where difference of opinion exists: that of fracture of the neck of the femur *within the capsule*.

"Union of this fracture is quite possible, but yet improbable. The following are the more important obstacles to such an occurrence. 1. There is an obvious difficulty in maintaining accurate apposition; restraining splints cannot be applied to the part itself, and it is difficult to maintain a uniform ascendency over the retracting muscles. If the periosteal investment remain partially entire, however, there may be little displacement, and proportionally slight shortening; and, in such a case, a better issue may be looked for. 2. There must be a want of provisional callus; there being no structure from which it may be produced, and in which it may be formed and sustained; the synovial capsule is obviously barren in this respect. The fractured ends may be said to be steeped in an increased secretion of synovia. 3. Also the definitive callus, which, if uninterrupted, might alone achieve consolidation—as happens in other fractures, when from any cause the provisional formation has been aborted—is ever liable to accident, by even slight movement of the parts. 4. The upper fragment, or head of the bone, nourished only through the round ligament, must be of weak power, and ill able to execute the exalted nutritive action necessary for rep-

aration. 5. The age of the patient, and the atrophied condition of the bone itself, are obviously unfavorable to reunion.

"With such adverse complications, it is no wonder that examples of union in this fracture are most rare. And yet circumstances may occur, in which that result may be attempted and expected, with every reasonable prospect of success. When, for example, the patient is comparatively young, when the shortening is slight, indicating but partial division of the periosteal investment, when the patient joins heartily with the surgeon in the use of means calculated to maintain apposition, and to prevent all movement of the fragments; and when neither become weary of the prolonged period of vigilance required,—for, be it remembered, provisional callus is wanting, and the definitive must do all. The ordinary result is the formation of a false joint; the parts becoming accommodated to each other by absorption, connected by new fibrous texture, and farther restrained by a thickened state of the capsular ligament; the limb remaining deformed, and comparatively powerless, yet permitting of tolerable comfort and usefulness, with the aid of a stick or crutch. In the extremely old, fatal sinking is very probable, under the shock of the injury, and the irritation of pain and confinement.

"In the last named class of patients, the use of means for effecting retention of the fragments is not expedient. Success cannot result; the annoyance will but aggravate the general disorder; and, not improbably, sloughs will form at the points where the splint exerts its pressure. It is sufficient to arrange the limb comfortably on pillows; and by very gentle swathing or deligation, to restrain motion. In the more hopeful cases, the long splint is to be applied as in treatment of the following injury.

#### ARTICLE XII.

*A Clinical Introduction to the Practice of Auscultation and other modes of Physical Diagnosis, intended to simplify the Study of the diseases of the Lungs and Heart.* By H. M. HUGHES, M. D., Fellow of the Royal College of Physicians, &c. Philadelphia: Lea & Blanchard. 1846. pp. 270. 12 mo. (From the Publishers.)

"The study and practice of auscultation and percussion is at the present day absolutely essential to every physician who would practice his profession to his own satisfaction, and afford to his patients all the relief which medical science can give. Unfortunately, but a small number of graduates in our schools are sufficiently acquainted with these means of diag-

nosis, to render them practically useful, and hence we find them either going through with these methods of exploration, where required by public opinion where they practice, without deriving from them any useful results, or neglecting them and denying their value altogether.

The reason of this state of things is obvious. It is that there are no means of becoming practically acquainted with them except by the aid of a good teacher, in a hospital. Hence, although there are at present numerous good works on the subject they are not of the value desired except to students in attendance upon hospital practice.

To such and to all desirous of possessing a simple description of the physical signs of disease, we can recommend this work. To those who desire fuller instruction in reference to the pathology of thoracic diseases, the great work of Lænnec, with notes by Andral, and that of Piorry on percussion, are to be preferred. The object of the author, which we think he has succeeded in obtaining, is thus set forth in the preface.

"That object is *not* to attempt to teach the practice of auscultation and percussion;—that, I feel assured, can be attained only at the bed-side of the patient—but it is to point out to the student the way in which he may learn it by himself. It is *not* to treat of the diagnosis of thoracic diseases; upon that I profess not here to enter; but it is to point out the physical signs of those diseases, and, as far as I am able, simply and intelligibly to explain the causes of those signs; it is to instruct the beginner in the mode, by which he is to obtain a knowledge of them, as well as to direct him how to interpret them."

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#### ARTICLE XIII.

*Lectures on the Operations of Surgery, and on diseases and accidents requiring Operations.* By ROBERT LISTON, Esq., F. R. S., Senior Surgeon to the University College Hospital, &c. &c., with numerous additions by Thos. D. Mütter, M. D., Prof. of Surgery in Jefferson Medical College, Philadelphia, etc. etc. etc. Philadelphia: Lea & Blanchard. 1846. pp. 565. 8 vo. (From the Publishers.)

This work consists of a series of lectures published in the London Lancet, and now collected in a volume. The works of Mr. Liston are all characterized by a vigor of style and energy of thought, which taken in connexion with his boldness as a surgeon, renders them very interesting. The present work is not an exception. Scarcely any operation is declined by Mr. Liston, on account of its difficulty or severity, and this



is also true of the editor. They both join, however, in condemning the extirpation of diseased ovaria, but the data and reasons upon which these opinions rest, are, perhaps, not sufficient to set the question at rest in the minds of the profession at large.

The additions of Prof. Mütter equal in quantity the lectures themselves, and consist in a great measure of papers which have already been laid before the public, through the medium of medical journals. It were needless to say that this work contains much valuable matter; yet it is with regret that we see the medical literature of our country, assuming so entirely, as it has done of late, the form of articles for periodicals and notes to foreign works, and we hope that Prof. Mütter is not in this manner to disappoint us of his promised system of Surgery.

D. B.

## PART IV.—EDITORIALS.

### ARTICLE XIV.

#### PREAMBLE AND CONSTITUTION OF THE ROCK RIVER MEDICAL SOCIETY.

The undersigned, judging from the experience of the past, believing that association for the mutual improvement and protection of the professions of Medicine and Surgery, if properly conducted, may result in the same benefits to the associated, as to Agriculture and the Mechanical Arts.

And, whereas, these professions are not protected by any legal enactments, but left, as we believe they should always be, to protect themselves, and to manage their own affairs, being willing to trust our improvement to our own exertions: We, therefore, the Physicians, Surgeons, and Apothecaries of Northern Illinois and Southern Wisconsin, do resolve to associate ourselves together as a Medical Society, and for the rule, regulation and government of the same, have adopted the following

#### CONSTITUTION.

ART. 1. This Association shall be called the Rock River Medical Society.

ART. 2. All Surgeons, Physicians, and Apothecaries, within the State of Illinois and Wisconsin Territory, may become members by signing their names to this Constitution, and paying the entrance fee hereafter named.

ART. 3. The objects of this Association shall be mutual improvement in the various branches of Medical, Surgical and Pharmaceutical knowledge.

ART. 4. The Officers of the Society shall be a President, 2 Vice Presidents, a Secretary, Treasurer, and three Censors, who shall hereafter be elected on the third Tuesday in May of each year, to perform such duties as are usually performed by like officers in similar societies, said officers to act till their successors are chosen.

ART. 5. The Society shall keep a common seal, and give to its members, (signed by the President, and countersigned by the Secretary,) sealed diplomas of membership.

ART. 6. Each member shall pay fifty cents each year on the third Tuesday in May.

**ART. 7.** The majority of members present at any annual meeting, may make and adopt such by-laws for its regulation and government, touching the qualifications of members, medical ethics, tariff of prices, &c. &c., as the majority may from time to time think necessary.

**ART. 8.** This Constitution may be altered, amended or added to by a majority of the members present, at any annual meeting.

**ART. 9.** There shall be an annual meeting of the society on the third Tuesday in May in each year, at 1 o'clock, p. m., at such place as the society may direct, and other meetings from time to time as may be found necessary and profitable.

**ART. 10.** There shall be delivered before the society at its annual meeting in each year, at least two essays on some medical subjects, by members of the society, fair copies of which shall be left at the disposal of the society by the authors.

**ART. 11.** Reports of interesting cases may be read at any meeting of the society, copies of which shall be left at the disposal of the society.

**ART. 12.** Any member of the society, after being heard in his own defence, may at the annual meeting be expelled for ungentlemanly or unprofessional conduct, by a vote of two-thirds of the members present.

#### BY-LAWS.

Your committee, appointed to draft by-laws &c. for the regulation and government of the Rock-River Medical Society, respectfully beg leave to report the following:—

**ART. 1.** At each meeting of this society, after the members shall have been called to order by the officer whose duty it shall be to preside, the following order of proceedings shall be observed. 1st. The reading of the records of the last meeting, by the secretary. 2d. The admission of new members. 3d. Reading the treasurer's report. 4th. Reading the the president's address. 5th. Reading essays. 6th. Reports of cases, and interesting facts. 7th. Miscellaneous business. 8th. Election of officers.

**ART. 2.** No person shall be entitled to membership in this society, unless he produce evidence of being a graduate of some regular medical school—a licentiate of some properly constituted medical society, or pass a satisfactory examination before the board of censors of this society.

ART. 3. All debates and all other proceedings of this society shall be conducted according to parliamentary usages.

ART. 4. Eight members shall constitute a quorum, but a less number may organize to adjourn.

ART. 5. The officers of this society shall be elected by ballot, and a majority of votes shall determine the choice.

ART. 6. At every meeting of the society, the president shall appoint 2 members to read original essays on some medical subjects, at the next succeeding meeting.

ART. 7. It shall be the duty of the members to keep a record of any important cases that may occur in their practice, and all facts of peculiar interest connected with the profession of medicine, and report the same from time to time.

ART. 8. No address or paper read before the society shall be published without the consent of the author.

ART. 9. No member of this society shall be subject to a trial for misconduct, according to art. 12th of the constitution, until the secretary has given him, at least, three months notice.

ART. 10. Special meetings may be called by the President, with the concurrence of either of the Vice Presidents, whenever they may deem it necessary.

ART. 11. No money shall be drawn from the treasury without an order signed by the President and countersigned by the Secretary.

ART. 12. Any eminent medical man, residing without the limits of this society, may be elected an honorary member, by a vote of three fourths of the members present at any regular meeting.

A. M. CATLIN, M. D.,

*Chairman of the Committee.*

### MEDICAL ETHICS.

RULE 1. It is the duty of every medical practitioner to treat his patients with steadiness, tenderness and humanity, and to make due allowances for that mental weakness which usually accompanies bodily disease. Secrecy and delicacy should be strictly observed in all cases in which they may seem to be peculiarly required.

2. The strictest observance of temperance cannot be too strongly inculcated on the minds of the practitioners of medicine and surgery; a clear and vigorous intellect and a steady

hand, being absolutely necessary to the successful practice of those branches of medical science.

3. Unfavorable prognostications should never be made in the presence of patients; yet, should there seem to be immediate danger, it becomes the duty of the medical attendant to apprise the patient's friends of that circumstance.

4. In every instance in which one physician has been called on to visit the patient of another, a consultation with the former medical attendant should be proposed. Consultation in difficult cases should always be recommended, and the physician called on for that purpose, should always pay the greatest degree of respect to the practitioner first employed, and allow him the privilege of delivering all the directions agreed upon.

5. Special consultations are sometimes wished for; in such cases, the physician called on, should carefully guard against paying another visit, unless he should be requested to continue his services by the patient, or some of his friends.

6. When one physician is called on to visit the patient of another in his absence, or during short indispositions, he should not manifest a wish to continue in attendance any longer than the physician first called on should be able to resume the charge of the case, unless a continuance of his services should be expressly wished for by the patient or his friends.

8. Theoretical discussions should not be too freely indulged in consultations, as they frequently give rise to much perplexity, without any improvement in practice.

9. The junior physician in attendance should always deliver his opinion first, the others according to seniority, and a majority should decide; but in the event of a tie, the physician first in attendance, should give the casting vote in regard to the future treatment, and to him should be intrusted the future management of the case, unless the patient or his relations should object to his being continued.

10. Although the possession of a diploma honorably acquired, furnishes presumptive evidence of professional ability and entitles its possessor to pre-eminence in the profession, yet, the want of it should not exclude practitioners of experience and sound judgment from the fellowship and respect of the regular graduate.

11. In consultations, punctuality in meeting at the same time should be strictly observed, but the physician who first arrives, should wait for a reasonable length of time for the arrival of others. A minute examination of the patient, however, should not take place until one or more of the medical attendants are present, except in cases of emergency. All subsequent visits, should if practicable, be made by mutual agreement, and no medical discussion should take place in the presence of the patient.

12. Attendance on members of the profession or their families should always be gratuitous, but should not be officiously obtruded. Should the circumstances of the medical practitioner indisposed, enable him to make a recompense for medical services rendered to himself, his wife or family, it is his duty to do so, especially if he reside at a distance.

13. When one medical practitioner is called on to visit a patient whose recovery has been despaired of by the physician first in attendance, and the disease should afterwards terminate fatally under his management, he should avoid insinuating to the friends of the deceased, that if he had been called on a day, or a few hours sooner, he could have effected a cure. Such a course of conduct is highly reprehensible, and empirical in the extreme. And, in the event of the patient's recovery, such a person should not assume all the credit, as the cure might have been partly effected by the medicines prescribed before he took charge of the case.

14. The use of nostrums and quack medicines, should be discouraged by the faculty, as degrading to the profession, injurious to the health, and often destructive of life. Should patients laboring under chronic complaints, obstinately determine to have recourse to them, a reasonable degree of indulgence should be allowed to their credulity by the physician; but it is his sacred duty to warn them of the fallacy of their expectations, and the danger of the experiment, and the necessity of strict attention to the effect produced by them, in order that their bad effects, if any, should be timely obviated.

15. No physician should, either by precept or example, contribute to the circulation of a secret nostrum, whether it be his own invention or exclusive property, or that of another. For, if it be of real value, its concealment is inconsistent with beneficence and professional liberty, and if mystery alone give



it value and importance, such craft implies either disgraceful ignorance or fraudulent avarice.

16. In all cases where diversity of opinion and opposition of interest give rise to controversy or contention between two or more members of the profession, the decision should be referred to a sufficient number of physicians, as they are frequently the only persons in the community capable of properly estimating the merits of the dispute. But neither the subject litigated, nor the decision thereon, should be communicated to the public, as individual reputation might suffer, and the credit of the profession generally be injured.

17. A wealthy physician, or one retired from practice, should refuse to give gratuitous advice, unless the danger of the case (the absence of the practising physician) or the poverty of the patient should warrant him in so doing. In all cases where he may be preferred, he should recommend a consultation with some one engaged in active practice. This rule should be strictly observed, as a contrary course is gratuitously depriving active industry of its proper reward.

18. When a physician is called on suddenly to visit the patient of another, in consequence of some unexpected or alarming change in the symptoms, he should adopt a temporary plan of treatment suited to present circumstances. He is not warranted in interfering afterwards, unless requested to take charge of the case, when he should propose an immediate consultation with the physician previously employed.

19. Physicians should never neglect an opportunity of fortifying, and promoting the good resolutions of patients suffering under the bad effects of intemperate lives and vicious conduct; and, in order that their counsels and remonstrances may have due weight, it will readily be seen, that they should have full claim to the blameless life and high moral character, which we have stated to be a necessary pre-requisite to an honorable stand in the profession.

*Names of the Members of the Rock River Medical Society:*

George Haskell, M.D.,	17 March, 1846. Rockford.
Samuel G. Armor, M.D.,	" " " " " "
Lucius Clark, M.D.,	" " " " " "
George Hulet, M.D.,	" " " " " Winnebago co.
Charles Mandeville, M.D.,	" " " " " "

A. M. Catlin, M.D.,	17	March, 1846.	Rockford.
J. C. Goodhue, M.D.,	"	"	"
Eli Hall, M.D.,	"	"	Winnebago co.
Alden Thomas,	"	"	"
Nathan H. Palmer,	"	"	"
Wm. H. Ealer, (Apothecary)	"	"	Rockford.
C. Martin, M.D.,	18	"	Freeport.
David Goodrich,	17	May	Rockford.
A. E. Ames, M.D.,	19	"	Roscoe.
A. Clark, M.D.,	"	"	Beloit, W.T.
O. Everett, M.D.,	"	"	Dixon.
C. Van Brunt,	"	"	Rockton.
Dexter G. Clark, M.D.,	"	"	Beloit.
Daniel Ransom, M.D.,	"	"	Belvidere.
W. W. Welch, M.D.,	"	"	Inlet, Lee co.
Daniel Brainard, M.D.,	"	"	Chicago.
R. S. Molony, M.D.,	"	"	Belvidere.
J. B. Nash, M.D.,	"	"	Dixon.
A. W. Benton, M.D.,	"	"	"
L. Humphrey, (Apothecary)	"	"	Beloit.
S. L. Clark, M.D.,	"	"	"
Edward Mead, M.D.,	"	"	Geneva, Ill.
Hurd, M.D.,	"	"	Byron.

Pursuant to adjournment, the Rock River Medical Society met at the Court House, in Rockford, Winnebago Co. Ill., at 1 o'clock P. M. The President, J. C. Goodhue, M. D., in the Chair; Geo. Hulet, M. D., one of the Vice Presidents, being absent, Eli Hall, M. D., was appointed Vice President, pro tem.

J. C. Goodhue, M. D., President of the Society, then delivered an address on the passed history and present prospects of the profession, in the west.

The committee appointed to report a code of by-laws and medical ethics, then made their report, which was adopted.

On motion of Geo. Haskill, M. D., it was resolved, that each member furnish the secretary with a concise account of his vouchers, place of birth, &c. &c.

On motion of Prof. Mead, it was resolved, that a committee of four be named by the Chair, whose duty shall be to report to the Society at its next meeting, the present state of the in-

sane population of Illinois: which committee was filled with the following named gentlemen; Prof. E. Mead, G. Haskill, M. D., A. Clark, M. D., and D. Martin, M. D.

After several questions of general interest to the profession, had been discussed at considerable length, without any special action on them, the Society proceeded to ballot for officers for the ensuing year; the following gentlemen received a majority of all the votes as follows, viz:

For President,	J. C. GOODHUE, M. D.
For Vice Presidents,	R. S. MOLONY, M. D. } O. EVERETT, M. D. }
Secretary & Treasurer,	S. G. ARMOR, M. D. G. HASKILL, M. D. }
Censors,	J. C. GOODHUE, M. D. } S. G. ARMOR, M. D. }

The Chair then appointed R. S. Molony, M. D. and O. Everett, M. D., to address the Society at its next meeting.

On motion of Prof. Brainard, it was resolved, that the proceedings of this meeting, the constitution, by-laws and medical ethics, be published in the Illinois & Indiana Medical and Surgical Journal.

On motion of S. G. Armor, M. D., it was voted to procure fifty copies of the above, for the use of the Society.

On motion of W. W. Welch, M. D., it was resolved that the thanks of the Society be and are hereby tendered to Dr. Goodhue, for his able and interesting address, and that he be requested to furnish a copy, or so much of it as relates to medical quackery and medical education, to the Illinois & Indiana Medical and Surgical Journal, for publication.

The President then requested Prof. Brainard, to deliver an address before the Society at 7 o'clock, P. M.: at which hour Prof. Brainard addressed the Society, on the subject of the improvements in surgery, with great credit to himself, and much to the gratification of the members of the Society.

The Society then adjourned, to meet at Dixon, Lee County, Ill., at one o'clock P. M., on the third Tuesday in October, next.

**SAMUEL G. ARMOR,**

*Secretary R. R. M. S.*

Rockford, Winnebago Co., Ill. May 19, 1846.

## ARTICLE XV.

## DR. GOODHUE'S ADDRESS BEFORE THE ROCK RIVER MEDICAL SOCIETY.

The address of J. C. Goodhue, M.D., delivered at the first annual meeting of the Rock River Medical Society, although of a popular character, to adapt it to the audience present on the occasion, offers points of interest to every physician in this region. The Doctor was one of the earliest regular medical practitioners in this part of the country, and his remarks upon the date of the profession here, are worthy of recollection.

He says: "When I first commenced the practice of Physic and Surgery, in the then village of Chicago, in eighteen hundred and thirty three, for it was at that time but a small insulated village, about one third the present size of Rockford, there was not more than two white settlers, and not one physician within the limits over which this society proposes to extend its influence; yes, gentlemen, from Dixon to Janesville, from Freeport to Pleasant Grove, John Dixon and Stephen Mack were, as far as I am informed, the only white men who had pushed their way into this beautiful and now fertile and well settled portion of the Rock River Valley.—p. 2.

"A few moments are due to the early medical pioneers. So far as I am informed, Doctor Harmon was the first physician who settled at Chicago. There had undoubtedly been surgeons of the United States Army stationed at Fort Dearborn during the war of eighteen hundred and twelve, but Dr. Harmon was the pioneer among the medical faculty of this corner of Illinois. I am informed he still lives, and is at Naperville, in Du Page county. Dr. Kimberly was the second, and is still among the most respectable practitioners of Chicago. Doctor John T. Temple, of St. Louis, and Doctor Clark, since dead, were next. Doctors Egan, Eldridge, and myself soon followed at about the same time. This brings it to the spring of thirty-four, when a perfect flood of emigration poured in, and among them a sprinkling of medical men. Many of the early settlers of Chicago are still in the field of medicine, and engaging the confidence of the public."—p. 3.

"Within the bounds which this society propose to include, within a circuit bounded on the north by Janesville, south by Dixon, east by Pleasant Grove, and west by Freeport, Doct:

D. H. Whitney, as far as I am informed, was the first physician. He settled at Squaw Prairie, now Belvidere, as early as thirty-five or six, and has continued to reside there to the present time. Doctor George Dunbar was for a short time at Rockford, in thirty-six, and was, I believe, the second practitioner within the before named limits. Doctors Hall, Haskell and Goodrich were here at an early day, also Doctor Malony at Belvidere, Doctor White at Beloit, Doctor Van Valzeh at Freeport, and many others."—p. 4.

In reference to the characters and motives of those early physicians we record the following, as it may be applicable to the cases of some who are coming here at present.

"Anterior to eighteen hundred and forty, nine-tenths of all the physicians who had located themselves in this region, had done so with reference to pursuing agriculture, and with the avowed intention of abandoning medical practice; most of whom, either from the necessity of the case, or from finding more truth than poetry in pounding out rails, resumed their profession, and divided their attention between farming and medicine."—p. 4.

He does not dwell at length upon the character of the diseases or their treatment, but only alludes occasionally to these points.

"The diseases that have heretofore prevailed in the country, have been but a few from the long catalogue, and those few, easy of treatment, and requiring little variation in practice. Intermittent and remittent fevers, Diarrhoea, Dysentery, Pneumonia, will include nearly all the ills flesh has been heir to here as yet, and these in their mildest forms. This fact, alone, can account for the general good success of these farming doctors."—p. 5.

The scope of this address embraces the whole field of the duties of the physician, his studies and his conduct, and exhibits with vigor, clearness, and at times with eloquence, the scenes he must pass through, and the character he should sustain as a member of a time honored and liberal profession. It portrays in its true colors, all modern forms of quackery. The sentiments of it were heartily responded to by the members of the society, in such a manner as to show that they were heartily approved, and to indicate that among all the changes to which we are subjected, there still remains among

the working men of the medical profession, a little of the good old spirit, felt and transmitted by Gregory, Percival, Rush, and a crowd of worthies whose names adorn the pages of medical history.

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ARTICLE XVI.

PROSECUTION FOR MAL-PRACTICE. ARBITRATION.

John Beals, }  
 vs. }  
 Nathan M. Thomas. } This was an action for damages in the Circuit Court of Kalamazoo, Mich., which had once been brought to trial before that court, the Hon. Epaphroditus Ransom, Chief Justice of the State of Michigan, presiding, when the jury returned a verdict of \$300 damages. A new trial had been granted, but at the June term it was taken out of court and referred to Dr. Zina Pitcher, of Detroit, Michigan, and Dr. Daniel Brainard, of Chicago, Ill., as arbitrators, with power to choose a third person in case of disagreement.

The arbitration was held at the Court House in Kalamazoo, June 12, 1846. The most material facts of the case were stated by the witnesses as follows: Daphne Beals, daughter of John Beals, in August, 1841, being at the time about 11 years of age, was see-sawing on a board placed across a fence, and fell, injuring her left fore-arm and elbow. Doctor Thomas was called, and by the aid of an assistant made some extension and counter extension, and other manipulations, reduced and dressed it, saying it was a fracture of one of the bones. The dressings consisted of a roller, applied from the hand to the elbow, splints with compresses on the anterior and posterior sides, secured with a roller, and the fore-arm placed in a sling across the breast, according to some witnesses, at less than a right angle with the arm. (There was some discrepancy in the testimony on this point.)

These dressings were renewed every eight days, and the forearm flexed and extended during eight weeks when they were discontinued. The arm, according to the testimony of the girl and family, being in the same state as at present.

On examining the arm it presents the following appearances:  
 1st. The head of the radius can be felt with perfect distinct-



ness, and the prominence produced by its presence, seen in front of its natural position and upon the edge of the ulna. 2d. Every movement of the fore-arm and hand, flexion and extension, pronation and supination, can be completely performed. 3d. In flexion and pronation, the head of the radius returns to its natural position, but glides from it in extension and supination. 4th. Pressure upon the head of the radius also returns it, and the displacement is immediately reproduced upon removing the pressure.

Those familiar with the signs of dislocation of the head of the radius forwards, will immediately perceive that it is a case of that accident not attended by the usual symptoms. These are laid down by Sir Astley Cooper, thus: "The fore-arm is slightly bent, but cannot be brought to a right angle with the upper, nor can it be completely extended.

"When it is suddenly bent, the head of the radius strikes against the fore part of the os humeri, and produces so sudden a stop to its motion as at once to convince the surgeon that one bone strikes against the other, the hand is placed in a prone position, but neither its pronation nor supination can be completely performed.

"If the thumb be carried into the fore and upper part of the elbow joint, the head of the radius can be felt there, and if rotation of the hand be attempted, the bone will be perceived to roll; this last circumstance, and the sudden stop to the bending of the arm, are the best diagnostic marks of the injury."

Of these all but one, it will be seen, were absent in this case. The head of the bone could be felt, but when the fore arm was flexed, it did not arrest it, but striking against the os humeri feebly, it glided into its place.

From the manner of the accident the absence of all signs of fracture, taken in connexion with its present state, the arbitrators were of opinion that it was a case of dislocation, which, if reduced, had not been retained so, and they were obliged therefore to enquire what damage the plaintiff had sustained, and how far the defendant was responsible for it.

In relation to the first point we have already said that all the movements of the arm were complete, and it may be added that the muscular development of that arm (a good index of its power,) was nearly as great as in the other. It

was not a case of loss of a member from unskilfulness, still deformity, and a certain degree of inconvenience, resulted, and this, it is probable, might have been prevented, had the nature of the accident been recognized at the time.

But the accident did not present the ordinary signs, and if those only laid down by the best authorities are to be relied upon, it could not be a dislocation forward. These signs, in some cases are not present. This was a case of this kind, presenting therefore unusual difficulties, and liable to be mistaken by persons possessed of *ordinary* surgical skill. Dr. Thomas, therefore, could not be held responsible for the damage resulting from the injury, if he exercised care and diligence and ordinary skill. Care and diligence were no doubt used by the defendant in this case. He appears to be a physician of accredited skill, highly honorable character, and unpretending. According to the principles of law, as laid down by the highest authorities recently, no physician is liable for damages, if he exercises the utmost of his skill. On this head we quote the following decisions from the St. Louis Medical and Surgical Journal, for May, 1846.

“*Norfolk Lent Assizes*, April 5, 1845; before Baron Parke. *Gibbs vs. Tunnaley*. This was an action to recover damages for negligence and want of professional skill as a medical man, in the treatment of an injury of the arm. The Court held, “That, if, in the discharge of his duty, the physician *applied his professional skill and knowledge to the best of his ability*, then, however unfortunate the termination of the case, he was not to be visited with an action to mulct him in damages.”

“*Same Assizes*, *Queen vs. Raymond Gaches*, before Baron Parke; trial for manslaughter, in dragging away the womb instead of the placenta. ‘The learned Judge in summing up said, that he perfectly agreed with Lord Ellenborough, that if a medical man was to be punished for the death of a patient, whenever he used *the most skill he was possessed of*, such would be fraught with much danger. The prisoner, no doubt, at first, thought it was a simple tumor he was bringing away—that was a proof that it was an error in judgment. They might perhaps say he had a right to know; but how could a man learn without some practice? and if a man happened to make an error in judgment, was that to be considered gross ignorance, and imputed to criminal neglect? Doubtless, *if the man had known better, he would not have done so.*’

“These cases may be found at full length in the American reprint of the London Lancet, (for which they were specially

reported) for July, 1845. In the same journal, for March, 1845, pp. 267-8, we find the following additional case:

“*Midland Circuit. Forcible Inversion of the Womb; trial for Manslaughter, before Mr. Justice Patterson, who held in his charge to the jury, “That, if a person having skill and knowledge made an accidental mistake in treatment, through which the patient died, he was not guilty of manslaughter; it would be fearful if he were.”*”

Called upon to decide a case involving the rights of medical men generally, it was impossible not to remember that the same laws which render us liable to damages for ignorance, impose penalties for pursuing the study of anatomy, and that the State of Michigan, unlike the most liberal and enlightened governments of modern times, affords no sufficient protection for this branch of Science. There was but one point on which the arbitrators could not fully approve of the conduct of the defendant; it was in not advising the patient to seek the best surgical advice within her reach, in a case in which his own experience must of necessity have been limited.

On this ground, while shielding him from damages, they thought it best so to draw up their award as to avoid expressing in every respect, full approbation of the course he pursued.

#### AWARD.

The undersigned, to whom was submitted the matter in difference between John Beals and Nathan M. Thomas, having carefully examined the injured limb of Daphne Beals, and heard the testimony adduced in relation to the injury and its treatment, and the arguments of council in the cause, respectfully report to the Honorable Chief Justice of the State of Michigan, presiding over the Circuit Court of Kalamazoo County.

That they agree in the opinion, that the said injury was a dislocation of the upper end of the radius forwards not detected at the time of its occurrence, and that the defendant is therefore liable to the imputation of mal-practice, from defective anatomical knowledge.

Taking into consideration that this dislocation is one of rare occurrence, and has in several cases been found to be incapable of reduction, and that it was not in this instance attended

by the usual distinguishing signs, and was obscured by considerable swelling:

Considering farther, that the study of anatomy essential to the proper treatment of such cases, is by the laws of the State of Michigan a penitentiary offence; together with the fact, that the limb is still highly useful and may, in our opinion, be essentially improved by judicious treatment, we award that the defendant in this case, is not justly liable to any damages, and (if it belongs to the board to decide this question,) we further award that each party shall pay his own costs.

ZINA PITCHER.

DANIEL BRAINARD.

Kalamazoo, June 13, 1846.

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ARTICLE XVII.

Dr. WM. B. HERRICK, one of the editors of this Journal, has received an appointment in the Medical Staff of the U. S. Army, and is at present in Mexico. His labors for the Journal will not, however, cease: he will furnish for its pages a series of letters, embracing everything of interest which may fall under his observation in that country, whether connected directly with his duties, or relating to the medical topography of the places he visits, their advantages for medical men, &c. Should his duties require his absence during the winter, the course of anatomy in the Rush Medical College, will be given as formerly by Dr. Brainard.

## PART V.—ABSTRACTS.

## ARTICLE XVIII.

## ABSTRACT OF LATE VIEWS ON SOME POINTS IN THE PHYSIOLOGY OF REPRODUCTION.

*The analogy of Menstruation with the rut or heat of Animals.*

—Mr. Girdwood has, in the *Lancet* for December, 1844, set forth the following facts, established by observations on the dog, rabbits, cow and mare, viz: that the catamenial discharge appears in the lower animals as well as in the human female. The secretion is characterized also in them by a periodicity peculiar to each genus. It is, at least, in the higher order of mammals equally sanguineous. It attends the phenomena of rut or heat, and is microscopically and chemically more or less closely allied to that of the human female, being more similar the nearer we approach man in the scale of existence. It appears to be an increased periodic flow of the usual mucous secretions, with the addition, in the higher genera of animals, of more or less blood, which is, from its diffusion, deprived of its usual amount of coagulation. These correspond with results of the inquiries of Bischoff, Raciborski, and others.

In woman, and in female animals which exhibit the periodical discharge, it indicates the maturation of an ovum, its being on the point of discharge, and that the aptitude for conception is greatest at this period. In the human female the minute size of the ovum, and the rarity of opportunities of examining the bodies of those that have died during menstruation, render it difficult to prove this by the detection of ova; yet enough has been discovered to make the correctness of these views pretty certain.

With regard to animals, it has been proved by the experiments of Bischoff and Raciborski, that these are facts. Bischoff killed a lamb in rut for the first time, and which had never copulated, and found a Graafian vesicle ruptured in the right ovary, and an ovum in the fallopian tube of same side. He extirpated the left ovary and fallopian tube, (closing the wound by suture) of a bitch, which was the second day in heat, and apparently desirous of receiving the male, but which was prevented, and found four Graafian vesicles in the ovary

extremely turgid, but none had burst. After five days the bitch was killed; four large corpora lutea were found in the right ovary, and in the corresponding fallopian tube, four ova.

Besides this he has shown that the converse may take place. On an examination of the ovaries at as long a period as eighteen hours after coition, no ova had escaped, although spermatozoa had reached the ovaries.—*Rankin's Abstract*, part 1.

In relation to menstruation, Dr. Carpenter says: "This flux of altered blood from the lining membrane of the uterus, is not confined to the human female, as was formerly supposed, but occurs in most of the lower mammalia, in the state of heat, or periodical aptitude for procreation, at which time the ovarium contains ova ready for impregnation."—*Elements of Physiology*, p. 433.

It has been urged against the identity of menstruation and the rut of animals that women are averse to sexual intercourse during the flow of the menses, whilst in animals, the male is only admitted during the period of rutting. This is answered by Bischoff and Girdwood, by considering the disinclination as the effect of habit and natural delicacy, rather than the evidence of any real disrelish, and that it is most probable that in human females, as well as in those of animals, the desire is greatest at this period, especially towards the decline of the discharge. It has been observed that bitches are languid and refuse the male during the first few days of heat, but after this they readily admit him. And this is considered analogous to the ailment of the human female in the early part of each menstrual period.—*Rankin's Abstract*, part 1.

*Spermatozoa*.—It is the opinion of Dr. Carpenter, that the spermatozoa, so called, are not animalcules, but merely cell germs, furnished with a peculiar power of motion. And that they have no more claim to a distinct animal existence, than the epithelia of mucous membrane, which has been seen in movement when separated from the body.—*Elements of Physiology*, p. 154.

Again he writes, "It is clear from the history of their development as well as other considerations, that they cannot justly be regarded in this light, and that they are analagous to the reproductive particles of plants, which, in many cases exhibit a spontaneous movement of extraordinary activity,



after they have been set free from the parent structure.”—*Op. Cit.*, p. 447.

*In what part of the Generative Apparatus of the Female, do the Spermatoza come in contact with the Ovum to produce Impregnation.*—Dr. Charles Ritchie of Glasgow, believes that the uterus in the human subject, is the normal seat of conception, and that the discovery of spermatoza on the ovaries of quadrupeds, *post coitum*, depends probably on their escape along the tubes, during conception, or on some accidental and rare arrangement of the mucus in their uterine ends, by which it becomes a conducting medium for the passage of the zoospermes.—*Lond. Med. Gaz.*—*From Am. Jour. Med. Sciences.* Jan. 1846.

Mr. Pouchet advocates a similar theory, and considers the observations of Bischoff and Wagner, who found live spermatoza on the ovaries, to be incorrect. In his own experiments which were chiefly made on rabbits, he found that from the 16th to the 23d hour after copulation, live spermatoza were constantly found in the vagina, but soon after they lost their activity, and by the 25th hour were dead. He was never able to see live spermatoza but a very short distance up the uterine tube, and therefore believes impregnation can only occur in the uterus, or in the (uterine) mouths of the fallopian tubes.—*Rankin's Abstract*, part 1.

Dr. Carpenter is doubtful whether impregnation takes place before the ova leaves the ovárium, or after it has been received into the fallopian tubes, but regards the former as the general rule. It “being quite certain that the spermatoza frequently if not invariably find their way to the ovary.” He does not at all refer to the question of uterine conception.—*Physiology*, p. 573.—*Elements of Physiology*, p. 456.

“Bischoff considers it to be immaterial at what part of the fallopian tubes the spermatoza and ovum come in contact, so that they meet before the ovum has reached the uterus, impregnation is sure to take place. He states that he has clearly traced live spermatoza to the ovaries.”—*Rankin's Abstract*, part 1.

That fertilization does take place in the ovary and fallopian tubes, is evident from the occurrence of extra uterine pregnancies. But nothing on the other hand has been adduced to prove that it does not also occur in the uterus.

H. S. H.

## PART VI.—SELECTIONS.

1. *On the Curative Medication of Intermittent Fever.* By M. BRETONNEAU.—A sort of drunkenness, more or less painful, produced by a single and suitable dose of sulphate of quinine, repeated, if necessary, two days afterwards, suppresses for eight days *simple* intermittent fever.

In the same way, that a person who is in the habit of intoxication, we find that much wine may be taken without producing this condition; so we every day see individuals affected with ague taking great quantities of quinine, without the fever becoming suppressed, or its return being prevented.

M. Bretonneau agrees with the Jesuits who first imported cinchona, and learned how to administer it; and with Torti, who for thirty years practised in the hospital at Tours, that every sufficient dose of bark loses its febrifuge power by fractioning it, exactly as a dose of wine loses its intoxicating property by being divided.

It has been stated that the prolonged administration of many doses, whose sum altogether amounted to several efficient doses, has completely failed. M. Bretonneau has seen a quartan fever, which had resisted two ounces of bark, yield to two drachms of the same medicine; but the two drachms were given at once, while the two ounces were taken in very small quantities at a time, and during fifteen days.

Small doses, which habituate a patient to the action of cinchona, injure the beneficial results of adequate doses; they hurt the digestive apparatus, and render the febrifuge intoxication more difficult to obtain.

M. Bretonneau corroborates the statements of Sydenham and Morton—that the dose of bark which has suppressed a paroxysm, if repeated before the supposed epoch of its return will prevent it; and, moreover, the immunity thus procured may be prolonged by renewed doses exhibited at gradually lengthened intervals, until a perfect immunity from relapse becomes established. The progression recommended in the giving of these preservative doses is the following:—A second dose equal to that which suppressed the fever is to be exhibited, according to the nature of the fever, on any day from the first to the sixth interval, then to be repeated after intervals of 7, 8, 9, 10, 12, 14, 16, 18, 22, 30 days. The best time for giving each preservative dose is immediately after a light dinner; and the first dose had better be given shortly after the decline of the suppressed access, so as to be as distant as possible from the next threatened paroxysm. A relapse will render it necessary to renew the treatment from the commencement. The preservative doses should be approximated if it is found that the accesses become more frequent.

Unusual exercise, the prolonged impression of cold, indigestion, purging, &c., provoke the return of the fever which ordinarily, with the precautions indicated, does not return till spring. Occasionally, at Tours, the fever which had been suppressed, but its relapse not guarded against by the preservative treatment mentioned above, was accustomed to become renewed during twenty or thirty months.

M. Bretonneau has observed that an adequate dose of sulphate of quinine commonly produces vertigo and noises in the ears; subsequently, at a period more or less elongated from the first effect, there frequently supervenes a febrile state, which there is danger of confounding with a return of the intermittent fever. This sort of fever is of good augury. During its continuance the skin is hot, the pulse elevated, and this state corresponds to that condition of febrile reaction, which it is so very erroneous as to dread in paludial affections. With extreme sagacity, Dr. Bally discovered, in 1821, that in Paris, agues became developed in the spring, in subjects who had spent the autumn in localities where the fever prevailed. Evidence, the most irrefragable, bore out this assertion, nothing similar having been observed in persons who had not left Paris. M. Bretonneau has found, that a fever developed under these circumstances has all the tenacity prevalent in the district where it was contracted.

From fifteen to twenty grains of the sulphate of quinine, or from three or four drachms of good cinchona, suffice to suppress the fever of an adult, and to keep it suppressed during eight or nine days. Many reasons lead to the belief, that it is useful that the necessary dose should not be exceeded.

Intermittent fever is endemic in the locality where these observations have been a multitude of times repeated; and the number of fever patients admitted into the hospital has been so great, that in this establishment, previously to the discovery of quinine, 1200 lbs. of cinchona have been prescribed in the course of ten years, and since that discovery, frequently 50 oz. of sulphate of quinine have been prescribed in the pharmacy during the three months of autumn.

If a serious and unusual symptom shows itself for the second time in the course of a fever, whose paroxysms have been but little marked; if a lethargic torpor, faintings, alvine evacuations, either bilious, or like the washings of flesh, or melanic; if a severe epigastric pain, a superabundant sweat, a marble coldness, shiverings, symptoms exceeding an ordinary severity, accompanied by prostration, nearly complete abolition of the pulse; if these symptoms become developed, and prolong the paroxysm beyond the previous term of its duration, the dose should be doubled and given before the complete decline of the paroxysm—the fever has now become *pernicious*. It is necessary to guard this large dose with a

third of a grain of watery extract of opium, or four or five drops of wine of opium. If tolerance on the part of the stomach can be obtained, it will be necessary to inject the febrifuge into the rectum. The intestinal rejection is most easily retained if it produces neither a sensation of heat nor cold, if it is deposited above the second sphincter—a region less exciteable than that which is below it, if it is small in bulk, (from three to four ounces) and if made to traverse a large pipe slowly; a mixture of two drachms of powdered cinchona and a scruple of sulphate of quinine, is more easily retained than a solution of half a drachm of sulphate of quinine.

A moderately abundant and substantial diet aids powerfully the good success of preservative treatment. This is what Sydenham and Morton, one hundred and fifty years ago expressly affirmed.—*Dublin Hospital Gaz.*, Dec. 1, 1845, from *Jour. de Méd.*, par TROUSSEAU, March, 1846, in *Amer. Jour. of Med. Sciences*.

2. *Polypi of the Female Urethra*.—In our preceding number (p. 484,) will be found some interesting remarks by Dr. Lever, on the vascular growths which occur in the female urethra, an affection to which sufficient attention has not been directed. With a view of furnishing a more complete history of the disease, we shall now present a summary of an interesting thesis (*Thèses de Strasburg*, No. 129), by Dr. M. H. BAVOUX, as given in the *Archives Générales*, for September last.

In the female urethra both a mucous and vascular structure exists, and this peculiarity gives to the polypi which occur in it, a peculiar character. They possess both a mucous and vascular structure, and these two characteristic elements are never observed increasing independently of each other. On the contrary, these small bodies are constantly seen to originate from hypertrophy of the mucous membrane, into which numerous vessels from the subjacent erectile tissue are prolonged, so that of all the species of polypi described by authors, those which, in a descriptive point of view, approach nearest to these tumors of the urethra, are, without doubt, the fungoid species; with this distinction, however, that these polypi rarely, and as it were exceptionally, degenerate.

Polypi of the urethra very rarely occur before the age of puberty, and appear to have for their cause, a too great stimulus of the genital organs. Thus the affection is more frequently met with in prostitutes than in other females. Schutzenberger has seen them occur after blennorrhagia; but, of course, frequent coitus or masturbation may act in the same manner.

The polypi sometimes project beyond the orifice of the

urethra, and lie between the large labia; they are sometimes retained within the interior of the canal; and hence the division into *external* and *internal* polypi.

*External polypi* are of much more frequent occurrence than the latter, and generally originate from the posterior wall of the canal, near the meatus urinarius, a circumstance which did not escape the observation of Boyer. At other times, however, they originate higher up, and thus remain concealed for a longer or shorter period, till by their increase or size, or the elongation of their pedicle, they at length protrude. Their size is seldom considerable; it varies from that of a currant to that of a large cherry, and rarely exceeds that of the latter. The pedicle is in general large as compared with that of the polypus, and decreases in size as the latter enlarges. Their shape at the commencement is very generally that of a cone; at a later period, from the increase of growth being irregular at various points, they assume a lobulated appearance. Their surface most generally is of a bright red colour; at other times it is somewhat pale, and at others of a deep red; sometimes they are entirely covered with a thin smooth epithelium; at others, this is wanting, and then they exhibit a villous fungoid aspect, similar to that of a wound in a state of suppuration. In this case, the tumour bleeds more easily when touched, is more painful, and smarts from contact with the urine. In general, polypi of the urethra causes no pain; in some cases, however, a sensation of burning, or even of extreme pain, is produced after walking, coitus, or the passage of the urine; the pain may extend to the fundus of the bladder, rectum, or uterus, so as to lead to a suspicion of disease in the latter. They are sometimes the cause of hematuria, and very often of slight hemorrhage after coitus. In some cases there is over-excitement of the genital organs; but there is rarely any difficulty in passing urine, and still more rarely incontinence of urine, even in those cases where the urethra is so much dilated as to permit the entrance of the finger. At first, their growth is pretty rapid, but after attaining the size of a bean or cherry, it becomes slower, or they remain altogether stationary. In one case in which the author saw the tumor developed, as it were, under his eyes, its commencement was marked by the rise of groups of vascular granulations on the lower wall of the meatus; these granulations become united at their base; the interstices which existed between them were filled up, and thus a polypus of the size of a pea was formed, with a tolerably large pedicle; it was excised by means of a pair of scissors. In general, polypi of the urethra are not a serious affection and may continue for an indefinite period. Spalderer, according to M. Gerdy, saw one evacuated with the urine. M. Tanchou, on the other hand, regards it as a disease very difficult to be rooted out in

adult females; but it is probable that the cases witnessed by M. T. were not cases of true polypus of the urethra.

*Internal polypi* seldom occasion any well-marked symptom which may lead to the suspicion of their existence; after attaining a certain size they make their appearance externally and then come under the description of those we have just given.

The author has traced, with great care, the differential diagnosis between polypus of the urethra, and some other affections for which it may be mistaken. The absence of accurate diagnosis is of little importance, as far as regards distinguishing it from hernia and hypertrophy, either of the mucous membrane or its folds; but the case is very different as regards introversion of the fundus of the bladder, or venereal vegetations. Introversion of the fundus of the bladder is characterized by the presence of a soft reducible tumour, of the size of a nut, and of a bright red colour; it is accompanied with severe pain and dysuria, which disappear after the introduction of a sound into the urethra. Polypi, on the other hand, are soft, indolent, irreducible tumours, which occasion no inconvenience in the excretion of the urine, and offer no obstacle to the introduction of the catheter into the urethra. An error in diagnosis between these two affections is easily committed, and if not avoided would lead to danger; more especially if excision of the tumour were attempted; but an error scarcely less unfortunate is that of mistaking polypi for venereal vegetations, not only because it throws suspicion on an otherwise innocent person, but also as subjecting her to a course of general treatment not altogether void of danger. An attentive examination of the tumour ought to remove all doubt. How, indeed, can a solitary, pediculated tumour, of a redder colour than the membrane, but having its consistence, bleeding easily, with a regular or lobulated surface, of a smooth or shreddy character, but always soft, be confounded with those small, hard, unequal projections of the size of a pin's head or a hemp seed, or with red granular excrescences, or finally, with those small flattened prolongations of the mucous membrane of the vulva, with irregular edges?

*Treatment.*—The author has never seen any good result from topical applications, (acetate of lead, for instance,) or repeated cauterizations. Pressure by means of conical bougies introduced into the urethra, as advised by Madame Boivin, has likewise appeared to him of little benefit. Removal of the tumor, either by scissors or ligature, is the only treatment he has found to be efficacious. In a case still under treatment, the tumour separated four days after the application of the ligature. Excision is more expeditious and less painful. It may be performed with a pair of curved scissors the tumour having been previously seized with a pair of for-



ceps, or a thread passed through its pedicle, so as to drag it outside the canal. In cases of internal polypus, the canal must be previously dilated, or an incision made through its walls, as performed by Varner, ere its excision can be attempted. As a matter of prudence the point of attachment of the pedicle ought to be cauterized, in order to prevent any tendency to reproduction.—*Amer. Jour. of Med. Sciences.*

3. *Orthopedic Surgery in Europe.*—Paris, May 19th, 1846.  
To the Editor of the Boston Medical and Surgical Journal.

DEAR SIR,—In Paris, during the last winter, I have found, as every medical man must find, numerous objects of deep interest; but my attention has been chiefly fixed upon subjects connected with orthopedy. Through the kindness of Messrs. Guerin, Bouvier and others, I have had many opportunities of observation in this most interesting branch of science. I have found in Guerin's wards, at the Hôpital des Enfants Malades, and at his weekly consultations, many cases of great interest. In addition to this, he has, at his own house, weekly meetings of medical gentlemen, for conversation on whatever matters of importance may have presented themselves during the week. Among the orthopedic cases at the Hospital, there were three or four in the various stages of treatment for congenital dislocation or luxation of the hip. To these I paid much attention, and watched their progress with care. Guerin's treatment and theory, in these cases, consists—Firstly, in continued extension of the limb. This is accomplished by means of a weight and pulley. There is a long, leather splint, well cushioned, applied to the leg, embracing it from the knee to the ankle. In this two rings are inserted—one for a cord which runs through a pulley at the foot of the couch, and to which is attached the weight. This is strictly and simply the course "*preparatoire.*" By this means, in the course of a longer or shorter period, according to the nature of the case, the head of the femur gradually descends to a level with that of the sound limb. This all-important object being accomplished, the second stage of the treatment, or the process of "*creusant,*" is commenced. A simple yet ingenious contrivance is used for this purpose; and the head of the femur in its new position is kept in almost constant action upon the acetabulum, thus excavating for itself a new socket, or rather, I should say, deepening that which we may suppose to have previously existed.

Guerin's theory in this respect is, that in no case is the cotyloid cavity entirely wanting. This he affirms as the result of his own observations on the numerous cases of congenital luxation which he has treated, but more particularly have the various *post-mortem* examinations, made either by himself or by his assistant, M. Kuhn (to whom, *post-mortem*

examinations of deformity is a subject of deep interest, and one to which he has devoted much time and attention,) confirmed him in his opinion. In every case a cavity has been found. In many cases, no doubt, it is extremely shallow, and in adults nearly obliterated, but never entirely. The patient who has been subjected to the mode of treatment of which I have been speaking, is often, after a certain length of time, permitted gradually to make use of more active exercise, and he proceeds from simply swinging the limb, to the walking stool, in which the chief part of the weight is taken from the still feeble member, and there, as the process of cure continues, he is enabled to make a free use of his own feet.

It may be, however, that before the first part of the process can be accomplished, namely, the descent of the head of the bone, the aid of tenotomy will be required. This may be termed the second class. In this case it may become necessary to divide the various muscles which by their contraction offer an opposition to our efforts. As, for example, I can recall a case in which the tendon of the two adductors, the *gluteus medius* and *minimus*, the *psoas*, the *rectus femoris*, as also (the case being complicated) the *biceps*, the external lateral ligament and the *tendo-Achilles*, were each in their turn divided. But in that class of cases, in which the depression is so extremely shallow as to render vain the attempt to secure the head of the bone in its normal position by this course of treatment, a mode more bold and active must be adopted. In these cases Guerin performs an operation, which first suggested itself to him, as the result of these more general applications of the fundamental principle upon which the operation by the subcutaneous method has taken its stand, and the more extended application of which he is the acknowledged originator. This operation resembles that which he performs for the radical cure of hernia. The head of the femur rests in all these cases on the dorsum of the ilium; the capsular ligament is of necessity much elongated, being stretched, according to the extent of the deformity, either one inch and a half, or two, or sometimes even three inches. The luxation having been reduced either by the simple means, or by division of the muscles, and the process of passive exercise, &c., having been tried without success, there being still, after a proper length of time has elapsed, a constant disposition of the bone to return to its abnormal position, slipping from its place when the slightest weight is applied to it, the operation then becomes necessary. Guerin introduces his instrument from without inward, and carries it down to the capsular ligament, which he cuts across upon a level with the upper lip of the socket. By this means effusion of coagulable lymph is produced. There is adhesion and cicatrization, with its necessary result, contraction. In fifteen days gentle passive motion is made

use of, and in time a firm ligament is formed, by which the head of the bone is held securely in its new position. Immediately after the operation a band is placed firmly round the pelvis, with a compress upon the joint. Several other cases were described to me, besides those I have seen at the Hospital, some of double, some of single congenital luxation, in which the operation has been attended with the most favorable results.

4th. There is yet another class of cases. In certain children the resistance to the means employed for producing a descent of the head of the femur, is so great as to render these efforts wholly ineffectual. What is very curious in these cases is, that in lieu of this, there is an elongation of the bone itself, by which ample compensation is made. Thus we have still the signs of dislocation on examining the hip-joint, but on comparing the two limbs we find them of the same length. There was one very fine example of this in the Hospital, affording by accurate measurement, positive proof of the occurrence of this elongation. The patient, in this case, will have, of course, a slight awkwardness in his gait, but without the usual limp. I will not leave this subject without briefly remarking that in this, as, in truth, is the case in Paris, upon almost every subject connected with medicine, there has been much controversy, and that M. Guerin and Bouvier have arrayed themselves upon opposite sides. Of course I shall not attempt to form a decided opinion until I have had a still greater number of cases presented to my view, and have had that opportunity for careful and accurate observation which private practice can alone afford.

As a curious example of the truth of the above remark, and of the thorough investigation which all things here undergo, having any connection with the science of medicine, may be cited the controversy which has been going on the past winter between MM. Velpeau and Blandier on the treatment of hydrocele, with the particulars of which you are no doubt well acquainted.

The course of treatment pursued by Messieurs Guerin and Bouvier, and by Dr. Little, of London, for the various phases of spinal disease, is the same as that employed at the Boston Orthopedic Institution, with the exception that the above-named gentlemen adopt the prone position in a somewhat greater number of cases than has been the practice in Boston. The only reason why this should not be more generally made use of in certain cases, is the wearisomeness of the position, almost entirely debarring the patient from the amusements of which the other positions admit.

In some cases no doubt this mode of treatment is very important, as in scrofulous disease with excurvation, where the anterior portion of the bodies of some of the vertebræ are in a

state of caries. Here the prone position is undoubtedly the one which affords the greatest promise of success, and should in all cases be employed where the patient can be prevailed upon to submit to it. To be used with the expectation of a favorable result, there is much minutiae to be attended to in regard to the formation of the couch, adjustment of the cushions, together with the appropriate body apparatus so arranged that while the patient is recumbent there shall be a gentle elastic pressure constantly exerted upon the protuberant part. Guerin remarks that the course pursued should be the same as that for the fracture of a limb, and that, as far as this part of the treatment is concerned, this disease should be viewed in the same light.

It is greatly to be regretted that in Paris the provision for that large class of sufferers who are afflicted with some of the various deformities which recent advances in science have so well prepared the surgeon to relieve, but who have the additional misfortune of poverty, should be so inferior and so unworthy the results which might be effected under other circumstances, and which has been brought about in private practice. From the great error which was committed in the first instance of placing the patients of this class in one of their large public hospitals, merely allotting two or three of the smaller wards to their reception, it has seemed to me impossible that in certain cases the surgeon should be able to do either himself or his patients justice. This is more especially the case in lateral curvature, and general feebleness of the muscular and nervous systems, where the all-important auxiliaries of gymnastic exercises, suited to attain the peculiar object in view, be it the development of a particular set of muscles, or the general strengthening of all the muscles, or quickening the dormant circulation and giving vigor to the debilitated nerves, must be for the most part abandoned for the want of necessary accommodations to permit that variety of exercises being made use of, which are requisite to insure complete success. How inferior must such a charity necessarily be, connected with a hospital devoted to other purposes, to one especially set apart for the purpose, be it public or private. Of those of the latter class which I have seen in Europe, that of M. Bouvier has given me the most pleasure. Of the variety and appropriateness of the arrangement to be found at this institution, I shall speak more in detail hereafter.

The couches of extension and sigmoid flexion combined with suitable exercises, are the means considered the most effectual, and upon which chief reliance is to be placed, in cases of lateral curvature. As an adjunct to this, and to be used while the patient is walking, &c., these gentlemen make use of some form of spinal support for body apparatus. This consists for the most part of a modification of Tavernier's

Lever Belt, which in a number of cases is without doubt an instrument of great value.

All orthopedic surgeons agree in the necessity of spinal supports being used in some form for spinal curvatures, and for a perfect instrument of this kind, which shall unite the advantages of those we have, without their defects, is what I have sought for diligently. The best which I have seen, where the object has been to go farther than merely to afford support to the spine or staying it in the new position to which other remedies have brought it, until the feeble muscles shall have acquired power to perform their office without this aid, are those employed by Dr. Little, which are still a modification of Tavernier's, but more powerful and better adapted to a great number of cases.

In the treatment of lateral curvature there are of course many other things to be taken into consideration, particularly where there is a scrofulous diathesis, or where the general health is enfeebled. In all cases the attention of the surgeon is to be directed with much care to the less prominent symptoms. Dr. Zinck, of the Orthopedic Institution, Vienna, lays much stress on false positions during sleep, as a cause of this complaint; as, for example, lying with the head inclined toward the left side, thus checking inspiration on that side. He says that on this account the process of cure is rendered much more tedious, and he considers that patients should be watched much during their sleep, that the injury arising from these false positions may be obviated. He has found the muscles of inspiration on the left side in such cases much atrophied.

In the Royal Orthopedic Hospital, London, much reliance is placed upon the instrument to which I have referred above. This was the first orthopedic institution I visited in Europe. It is solely a charitable institution, and owes its origin to the disinterested efforts of Dr. Little, by whom it was carried to a great degree of perfection and usefulness. Mr. Tamplis is now the senior, and Mr. Lonsdale the junior surgeon. The latter gentleman has already made his appearance before the English surgical community, as the inventor of two or three surgical instruments and apparatus. One, in particular, for the fracture of the lower jaw, bids fair to be an instrument of great value.

This Institution or Hospital has accommodations for about forty patients. During the last year seventy-five patients have been admitted, of whom forty-eight have been discharged cured, and eighteen relieved. The number of out-patients is, however, very large. There are two days in the week appointed for their reception, and on these occasions from sixty to eighty patients constantly present themselves. These are for the most part different on different days, and the whole number dependent upon the institution for advice is nine hun-



dred and sixty-nine. The whole number which have been treated at this institution since its formation, is four thousand. It is supported entirely by subscriptions, which now amount to £1917. The list is headed by Prince Albert, followed by a number of the nobility.

The treatment of club feet is a subject which is now so thoroughly understood on both sides of the water, that I need scarcely refer to it here. The chief difference consists in the form of apparatus employed. That of the model which I brought with me from Boston, is considered by Little, Guerin and others, as one of the most perfect they have seen; and, as Dr. L. observed, when speaking of the various apparatus in use, the great expense of this kind of *especial* work in London, is the only reason why this more perfect form cannot be universally adopted.

In some future communication, I shall take occasion to refer to a novel and effectual method now pursued for straightening the bent limbs of rickety children, for the diagnosis and cure of stammering in those cases which admit of a cure, and also for the treatment of some of the varieties of scrofulous diseases and of nervous debility. Until which time, I remain, Sir,

Your most obedient servant,

BUCKMINSTER BROWN.

4. *Hospital Necker.—Clinical Lectures on Diarrhœa of Infants.*—By PROFESSOR TROUSSEAU.—The influence of the change of seasons is very strongly felt in hospitals destined to infants. During the course of the winter a numerous series of pulmonary and cephalic disorders has passed before us; we are entering now into spring, and the coming heat will bring with it intestinal affections. Soon, perhaps, you will not in one month meet, in these wards, with a single case of pneumonia, twelve or fifteen cases of which were admitted during every month of the winter. Thoracic diseases will be replaced by abdominal symptoms, and amongst these diarrhœa being the most frequent, the most difficult to treat properly, and the least understood, we will endeavour to prepare you beforehand for its observation by some remarks upon its pathology and treatment. The subject is extremely difficult, and although I have for eight years devoted myself to a daily study of the maladies of infancy, I feel myself in the dark with regard to many of its details, and do not therefore pretend to give you a completely satisfactory description, but merely to impart the little I do know of the matter. In order to introduce some regularity in the following remarks, we deem it necessary to establish a practical division between the various sorts of diarrhœa which are observed in children. We acknowledge only four primary forms of diarrhœa. 1, bilious diarrhœa; 2, mucous diarrhœa; 3, linteric diarrhœa; and 4,



cholericform diarrhœa, or cholera infantilis. These forms are perfectly distinct from each other, and all the varieties of diarrhœa which may be observed in children, and which do not seem at first to have a place in our classification, will be found to consist of combinations of several of these original forms, or of deviations from these elementary types.

*Causes.*—Bilious diarrhœa may consist in a simple increase of the biliary and pancreatic secretions, or in a perversion of their qualities. Both may result from local irritation, but the first is often produced by mere physiological excitement. We will find a double illustration of these pathogenic influences, in the abundant flow of saliva determined by stimulation of the mouth with mercury, and in the increase of the secretion of tears caused by sorrow. Thus, slight inflammation of the stomach or duodenum will occasion a discharge of bile into the intestine; thus fear, anger, nervous excitement, in a word, will produce an increase of the biliary, pancreatic, and sometimes the renal secretions. We may say we meet with daily examples of the great power of physiological stimuli on the conglomerated glands. The diarrhœa of the young soldier who goes into action for the first time, is another common instance of the same kind, a further illustration of which we find in the influence of dreams on the spermatic organs. Violent exercise, abundant perspiration in many persons bring on diarrhœa. In the water-cure, a method of treatment too advantageous in some diseases to be entirely left to quacks, we find that during the process of packing, if the patient is made to drink several tumblers of water, abundant perspiration is thrown out, but if diaphoresis does not appear, the mucous surface of the intestine substitutes its action to that of the skin, and relieves the system by diarrhœa. One of the most frequent causes of diarrhœa will be found to reside in the quality of the food. The presence of globules of colostrum in the nurse's milk, due, as Donn   has proved, to latent irritation of the mamma, sudden weaning, the exhibition of improper food, are all circumstances by which diarrhœa may be occasioned in the infant. The habit of covering the child in bed with too warm clothing, is also a frequent cause of disease. This is unfortunately a habit very prevalent among the lower classes in this country. So many as four blankets are thrown over the child, who is besides enveloped in swaddling clothes; and to add to the child's comfort, the mother not unfrequently adds her pillow to his other clothing. Abundant perspiration is thus produced, and, without any regard for the consequences, the child is extracted from his bed to be suckled or cleaned, thus being exposed several times a day to sudden changes of temperature, the result of which is pulmonary disease in winter, and intestinal derangement in summer.

*Semeiology.*—Bilious diarrhœa generally follows slight fever-

ishness, and is often preceded or accompanied by vomiting. The mouth is bitter, the tongue foul, and the appetite absent. The colour of the motion varies from yellow to green, according as the biliary secretion is changed in its quality, or only increased in quantity. Its duration is from three to six days, and its termination favorable, unless the case is mismanaged. It is in fact a slight catarrhal condition of the mucous surface. Mucous diarrhœa is marked by the discharge of a new secretion from the bowels; it is often the consequence of the first variety of disease, or of indigestion. The nutriment acts as a foreign body upon the intestine, producing local irritation, and the excretion of a slimy mucus. This is a very common, and fortunately not very dangerous form. But when the irritation of the digestive tube is carried beyond certain limits, matters take a more serious aspect; enteritis sets in, and the products of inflammation are passed with the motions. Colitis occasionally makes its appearance, attended with intense pain, betrayed by cries uttered two or three minutes before the motions, with which a small quantity of blood is sometimes mixed, the dejections assuming a dysenteric character. When the small intestine alone is inflamed, our third form of diarrhœa, lientery, appears. In this variety the food passes unaltered through the digestive organs, and is recognisable in the dejections, in which grains of rice, vegetable substances, curdled milk, can be readily distinguished. This is an extremely dangerous derangement, on account of the impossibility of refection.

After one of the above kinds of diarrhœa, occasionally without them, the cholera of children—that almost invariably fatal affection—is observed to show itself. After dejections of a bilious or mucous character, the infant is suddenly seized with violent vomiting, against which the efforts of art remain unavailable. A watery diarrhœa of a greenish hue is at the same time discharged from the bowels, and alarming general symptoms are noticed. The eyes sink in the orbits, the features are decomposed, the complexion becomes livid, and the nose, tongue, extremities, and even the breath, grow cold; the cry is acute, small, and incessant; the skin loses its elasticity, and when pinched in any part of the body, retains the folds made by the fingers, as if it were but an inert membrane. The child is sleepless, but without convulsions. Such are the first symptoms of this formidable malady. In its second period the vomiting, and sometimes the diarrhœa, cease, but no amendment follows. The collapse increases, and the infant almost invariably dies. We have, however, occasionally had the consolation of saving some few cases; one is at present in the wards, to whose case we called your attention, and who owes his recovery, under Providence, to the double tartrate of soda and potass.

*Treatment.*—We have found few drugs of any avail in the treatment of the bilious diarrhœa in children. It is a convenient plan to call the disease a gastro-enteritis, because the denomination leads to an invariable line of treatment, accessible to understandings of the meanest capacity. We take, however, a different view of diagnosis generally, and deem it unprofitable unless it leads to some practically useful indication. Some forms of diarrhœa are doubtless less difficult of cure than others, but we must say that the varieties we have described often combine with each other, so as to cause the practitioner no small embarrassment, and to reduce him, in many cases, to a blindfold empiricism; not but that we profess much respect for that empiricism which teaches us to exhibit mercury in syphilis, steel in anemia, and bark in ague; but the empiricism we deprecate as a contemptible method, is that which is not guided by diagnosis. The method we refer to may become a useful guide to the detection of the nature of disease, and it then acquires a considerable degree of utility. Let us remind you of a case of hemicrania at present in the wards. The attacks were periodical, and we tried sulphate of quinine without success; thus acquiring the knowledge that it was not governed by miasmatic influence. We exhibited then mercurial preparations, and the nervous headache having yielded at once, we were led to attribute the disease to syphilis. This is the empirical method we adopt; it is not the empiricism of *experiment*, but of *experience*. Thus, if we say that a patient is affected with neuralgia, we express a diagnostic opinion which is as elementary, and, let us add, as useless, as to say that he is affected with a corn on his foot; but it is quite another sort of thing to say that the patient is labouring under gouty, syphilitic, miasmatic, rheumatic, or chlorotic neuralgia, because this kind of diagnosis leads us to the real therapeutic indications. To return to the treatment of diarrhœa: Let us not forget that, to arrest the superabundant intestinal secretion is not by any means to cure the complaint which caused it. It is our opinion that bilious diarrhœa is only a very superficial catarrhal derangement of the intestine. The most efficient treatment consists in the exhibition of neutral salts, such as the double tartrate of potass and soda, phosphate of soda, Epsom or Glauber salts. We do not wish you to understand that we recommend the use of purgatives. No; castor oil and magnesia, or manna, you will usually find unsuccessful, whereas the neutral salts generally produce a speedy amendment. We have also derived benefit from the exhibition of the pulv. ipecac., at doses varying from two to ten grains, and mixed with a little jam, milk, or simple syrup. The action of this medicine is threefold; it is a substitutive, a discutient, and being a diaphoretic deviates towards the skin those vital energies which are occupied in the production of

morbid symptoms in the alimentary canal. But when the bilious diarrhœa is the consequence of mere nervous excitement—when it is caused by fear or anger, as tears by grief, or salivation by appetite—opium gives relief in a very short time. In these cases, which you will find to be characterised by the absence of any sort of suffering during the first twenty-four or thirty-six hours, the disease will speedily yield to the influence of hypnotic medicines. Half a drop of Sydenham's laudanum is a sufficient dose for a child under six months; others, it is true, will bear two or three drops, but that dose is too powerful a narcotic for the many. The laudanum should be dissolved in an ounce mixture, whereof the patient shall take a teaspoonful every three or four hours; but when the disorder has lasted beyond the specified time, opium ceases to possess its salutary effect, because the mere presence of the increased secretions on the mucous surface has sufficed to bring on an irritation which did not exist at first. Then we must again have recourse to neutral salts.

In mucous diarrhœa we have generally derived benefit from three sources: saline purgatives, calomel, and rhubarb. The dose of calomel we recommended is one-fifth of a grain daily, mixed with half a drachm of sugar. This should be continued two or three days at furthest. As to rhubarb, it is the "syrup" we use, the so-called "sirop de chicorée"—a good preparation in everything but its absurd name, which insinuates the idea of the efficacy of the endive, which is on the contrary perfectly, inert. Great attention should be paid to the child's diet; his food, less abundant than usual, should be chosen with great care. Milk is the most proper food for young children; fecula and broth also may be given after the expiration of the first year, and the drink should be in small quantity. In the choice of food the physician must also allow himself to be guided, in a great measure, by the idiosyncrasy of the child, and the mother's remarks on the peculiarities of his appetite.  
—*London Medical Times.*

5. *Quackery in New York.*—To the Editor of the Boston Medical and Surgical Journal:

SIR,—For the first time finding myself in the great emporium of everything, ycelpt the London of America, I have thought it might interest your professional readers somewhat, if I should furnish a few notes of my gleanings here in the way of quackery. From all I can see here during a brief sojourn, I should think that the population consists of two classes about equally divided, one half being employed in *making and vending* physic, and the other half in *swallowing* it; but my *penchant* is with the former moiety, among whom I have been making a tour of inspection. The better to effect my purpose I have doffed the doctor, and turned invalid, counterfeiting as

you will see, all manner of diseases, and amusing myself by visiting the quacks, and asking questions like a veritable Yankee, as I am.

Soon after my arrival, I read a flaming editorial in the papers concerning a certain dentist, who, tired of the slow profits of tooth pulling, announces himself a curer of consumption, having been cured himself. You may be sure that I hastened to see this prodigy, and putting on a woe-be-gone face, obtained an interview. He is a very pale and plausible dentist, I assure you, wholly disinterested and vastly religious, as a man surely ought to be with one foot in the grave, for such a cure as his I would not covet, since it gave me the horrors to look at him, and especially to hear his sepulchral voice, but little above a whisper, though he tells of his wonderful cure. All I learned from him was, that he thought I had the consumption, or would be likely to have it, if I did not catch the asthma, which he said was a certain "preventative." He showed me his remedy in the shape of a tube, exactly like those used in Boston and elsewhere by deaf persons, though instead of placing one end to the ear, it is applied to the lips; and he showed me how to breath through the tube by inhaling and expelling the air, which he says affords *exercise* to the lungs, and thus cures the consumption by producing a kind of artificial asthma. He showed me a pamphlet which he benevolently gives away, and a book which he sells along with the tube for five dollars, to those able to buy it, half price to ministers, and, it is said, he gives tubes gratis to the poor. The book is mainly a reprint of the old work of Ramage, of London, entitled "Consumption Curable," which was shown up at the time in the British and Foreign Medical Review, and never before deemed worth re-publication, until this effort to revive his tube in America, after it has become a stale joke in England as the relic of the mountebank St. John Long, from whom Ramage took his cue.

As I was altogether incog., I listened with great gusto to this dentist doctor's cure, for which it seems he went to London, together with an account of the celebrated hospital of Dr. Ramage, under royal patronage, which he described to me as one of the most important public institutions in Great Britain. And he told me of the wonderful cures he had made since his return. I found he was a thorough paced homœopathist, and did not depend upon the tube alone in any case, but advised those who used it, to take the little sugar pellets of Hahnemann, and he boasted of the patronage of that school of physicians in the city, who, it seems, recognize him as a worthy coadjutor.

I need scarcely add that in our conversation he betrayed an utter ignorance of the pathology of consumption, blundering in every attempt to describe or discriminate cases, so that



I left him in amazement that any editor should so far forget himself as to admit into his columns an eulogy upon so illiterate a pretender; but I suppose it is all paid for under cover of advertisements.

I had gone but a little way from his door, before I met an old physician and friend to whom I related my rencontre with this rival of the faculty; from whom I learned that hundreds of these tubes have been bought by the dupes of this folly, and that instances of rapid fatality are known to the profession, resulting from the effort to exercise tuberculous lungs with this villainous tube. The profits of the trade, however, exceed those derived from pulling teeth.

My next visitation was paid to a celebrated advertising quack, who cures all incurable diseases by a combination of homœopathic medicines prescribed by a *sleeping partner* in the person of a lady, who, when her eyes are closed by mesmeric passes, can look into the great cavities of the body, examine minutely the several internal organs, detect the nature and seat of the malady, and direct the preparation of the infallible remedy in every case. The learned doctor has such confidence in his female associate in practice that he does not presume to give an opinion without consulting her ladyship, taking care always to mesmerize her into the somnambulist state, for the reason that she knows nothing at all when awake, but is no sooner put to sleep than she discourses like an oracle upon pathology and therapeutics; whereupon the doctor having received his *fee* for his sleeping partner's advice, is prepared for *another fee* to furnish her prescriptions to the patients. Having learned this state of facts, I retired, not being willing to wait for my turn among so many patients as I found ready to precede me, so that this "craft has great gains," and the twain are driving a profitable trade.

I now thought I would look after the galvanic tribe of quacks who are innumerable here. Electricity, galvanism, and magnetism, separately and combined, are remedial agents greatly in vogue at present among quacks. There are some who use the galvanic battery in the usual way for all cases indiscriminately; while there are others who have magnetic plaster for the outside of the body, with magnetic pills for the inside, by which they have a perpetual current of electro-magnetic fluid flowing with as much certainty and regularity as Prof. Morse's telegraph, provided the patient continues to wear the plaster and take the pills. But all these are mere pigmies compared with the celebrated professors and doctors who vend galvanic rings, bracelets and belts, together with magnetic fluids, and I contented myself with calling on the most celebrated of these. I put his rings on every finger and thumb, with his bracelets on my arms and legs, and his belt about my body, offering to buy them all *for my complaints*, provided I could feel that they



had any effect upon my nerves. But though his "fluid" was sedulously applied, I had no more evidence of the generation of galvanic influence, than though the rings had been made of wood, the bracelets of hair, and the belt of leather. He assured me that many persons were shocked to the ends of their fingers and toes by applying a single galvanic ring, and he showed me certificates of numerous cures of frightful disease which had been thus wrought. Of course he professed to be astonished at the failure upon my person, and wondered how I could be so insensible, especially as I assured him I was "nervous." I proposed that he should put on the rings himself, and tell me candidly whether he could feel any galvanism; but he declined the test, alleging that he was satisfied with witnessing their success in others, and he appealed to his profitable trade in the articles as proof of their curative powers not to be gainsayed. I declined making any purchases of the mountebank, and pursued my tour among the other quacks of the city, of which you shall hear in my next.

A PERIPATETIC AND COSMOPOLITE.

TO READERS AND CORRESPONDENTS.

Communications are on file from Drs. Evans, Ames, Allaire and Huber.

We must ask the indulgence of our Correspondents for any omissions in the acknowledgment of works, &c. received. In consequence of the departure of Dr. Herrick some of them may have been omitted.

We have received also the following publications—

The Medical Examiner. (In Exchange.)

The Bulletin of Medical Science. (In Exchange.)

The Western Journal of Medicine & Surgery. (In Exchange.)

The Buffalo Journal, and Medical Review. (In Exchange.)

Southern Medical & Surgical Journal. (In Exchange.)

The Western Lancet & Medical Library. (In Exchange.)

The St. Louis Medical and Surgical Journal. (In Exchange.)

The Medical News and Library. (In Exchange.)

The American Journal and Library of Dental Science. (In Exchange.)

The Boston Medical and Surgical Journal. (In Exchange.)

The Missouri Medical & Surgical Journal. (In Exchange.)

The New York Medical & Surgical Reporter. (In Exchange.)

The New York Journal of Medicine and the Collateral Sciences. (In Exchange.)

Summary of the Transactions of the College of Physicians.

Annual Announcement of the Medical Department of the University of New York. Session, 1846-47.

Annual Announcement of the Jefferson Medical College, Philadelphia. Session 1846-47.

Catalogue of the Trustees, Faculty and Students of the South Carolina Medical College. Session 1845-46.

Annual Announcement of the Willoughby Medical College. Session 1846-47.

Minutes of the Proceedings of the National Medical Convention, held in the City of New York, May, 1846.

## CONTRIBUTORS TO THE ILLINOIS &amp; INDIANA MED. &amp; SURG. JOUR.

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## ADVERTISEMENT.

## UNIVERSITY OF THE STATE OF NEW YORK.

## COLLEGE OF PHYSICIANS AND SURGEONS.

## FORTIETH SESSION,

**THE** Annual Course of Lectures, in the College, will be commenced on Monday November 2, 1846, and continued until March 1, 1847.

**ALEXANDER H. STEVENS, M. D.**, President of the College, and Emeritus Professor of Clinical Surgery.

**JOSEPH MATHER SMITH, M. D.**, Professor of the Theory and Practice of Medicine, and Clinical Medicine.

**JOHN B. BEACH, M. D.**, Professor of Materia Medica, and Medical Jurisprudence.

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**WILLARD PARKER, M. D.**, Professor of the Principles and Practice of Surgery and Surgical Anatomy.

**CHANDLER R. GILMAN, M. D.**, Professor of Obstetrics and the Diseases of Women and Children.

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**Fees.** Matriculation Fee, \$5. Fees for the full Course of Lectures, \$94. Demonstrator's Ticket, \$5. Graduation Fee, \$25 Board, average per week, \$3. Clinical Instruction is given at the New York Hospital daily, by the Medical Officers, (Professor Smith being one of them,) fee, \$3, per annum; at the Eye Infirmary, without fee; and about 1000 patients are annually exhibited to the Class in the College. Clinical, Obstetrical cases and Anatomical material are abundantly furnished through the respective departments.

The annual commencement is held on the second Thursday in March; there is also a semi annual examination in September. The requisites for graduation are, twenty-one years of age, three years of study, including two full courses of lectures, the last of which, must have been attended in this College, and the presentation of a Thesis on some subject connected with medical science.

During the month of October, a course of lectures will be delivered on the following subjects;

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" Professor WATTS.

" Professor PARKER.

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R. WATTS, jr., M. D., Secretary to the Faculty.